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Title:
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length: 2000000000
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36
1 ELEDKQN 7
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1: sp_archea:*
2: sp_bacteria
3: sp_fung1:*
4: sp_human:*
5: sp_inverteb
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Match
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Gapop 10.0 ,
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sp_archeap:*
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sp_unclassified:*
sp_rvirus:*
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Q93YI4
Q93S44
Q9UWO
O68333
Q93KT8
Q8TNU6
Q8TNU6
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0 Q9SVY8
0 Q9U250
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O9svy8 arabidopsis
O9u270 caenorhabdi
O9x074 thermotoga
O01837 caenorhabdi
O96082 caenorhabdi
O9v273 drosophila
O9rh82 pseudomonas
O9rasc6 lactobacili
O93246 capsella ru
O23544 arabidopsis
O9uwv0 sulfolobus
O68333 yersinia en
O93kt8 yersinia en
O93kt8 yersinia en
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O93kt0 dechanosarc
O9z9v6 bacillus ha
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45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	. 17
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ALIGNMENTS

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RESULT 2
Q9SVY8
ID Q9SV
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DT 01-M
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Q8TCR7
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Matches ·7; Conserv
   Q9SVY8;
Q9SVY8;
01-MAY-2000
01-MAY-2000
01-MAR-2002
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01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Hypothetical 43.8 kDa protein (Fragment).
DKFZF761K0922......
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wambutt R., Heubner D., Mewes H.W., Well B., we Submitted (MAR-2002) to the EMBL/GenBank/DDBJ EMBL; AL713644; CAD28456.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID-9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hypothetical protein.
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                                                                                                                                                                                                                                                                                              178 ELEDKON 184
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386 AA; 43779 MW;
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20,
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Last sequence update)
Last annotation update)
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Pred. No. 14;
0; Mismatches
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J databases.
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RESULT 3
Q9U250
ID Q9U250
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Best Local S
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Q9U250;
01-MAY-2000
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Benes V., Rechmann S.
Mayer K.F.X., Lemcke
Submitted (APR-1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Arabidopsis thaliana (Mouse-ear cress).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae;
eurosids II; Brassicales; Brassicaceae; Arabidopsis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EU Arabidopsis sequencing project
Submitted (JUN-1999) to the EMBL/,
EMBL; AL049660; CAB41181.1; .
InterPro; IPRO00719; Euk_Pkinase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=3702;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Caenorhabditis elegans.
Eukaryota; Metazoa; Nemato
Rhabditidae; Peloderinae;
NCBI_TaxID-6239;
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Prodom; PD000001; Euk_pkinase; 1.

PROSITE; PS50011; PROTEIN_KINASE_DOM; 1.

ATP-binding; Hypothetical protein; Transferase.

SEQUENCE 357 AA; 41497 MW; A7CF501AB60DF620 CRC64;
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01-MAR-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                       White
                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                             SMART;
                                                                                                                                                                                                               Investigating biology ";
Science 282:2012-2018(1998).
EMBL; AL122851; CAB60411.1;
InterPro; IPR001507; Endoglii
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  329
                                                                                                                                                                                                                                                                                                         Genome sequence of the nematode C.elegans: A platform
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                                      ELEDKON 7
  ELEEKQN 335
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6; Conser
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O (TrEMBLIEL.
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rinae; Caenorhabditis.
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85.7%;
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ne EMBL/GenBank/DDBJ
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Pred. No. 1e+0
1; Mismatches
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RESULT Q9XOR4

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ACC DATE DATE OF THE PROPERTY 
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Q9XOR4;
Q9XOR4;
Q1-NOV-1999 (TrEMBLrel. 12, C)
Q1-NOV-1999 (TrEMBLrel. 12, L)
Q1-JUN-2002 (TrEMBLrel. 21, L)
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InterPro; IPR005289; GTP-bindding_dom.
InterPro; IPR003405; SMC_C.
InterPro; IPR003395; SMC_N.
InterPro; IPR003395; SMC_N.
InterPro; IPR002017; Spectrin.
Pfam; PF02483; SMC_C; 1.
Pfam; PF02483; SMC_N; 1.
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MEDLINE-99287316; PubMed-10360571;

Nelson K.E., Clayton R.A., Gill S.R., Gwinn M.L., Dodson R.J.,

Haft D.H., Hickey E.K., Peterson J.D., Nelson W.C., Ketchum K.A.,

McDonald L., Utterback T.R., Malek J.A., Linher K.D., Garrett M.M.,

McDonald L., Utterback T.R., Malek J.A., Linher K.D., Garrett M.M.,

Stewart A.M., Cotton M.D., Pratt M.S., Phillips C.A., Richardson D.

Heidelberg J., Sutton G.G., Fleischmann R.D., Eisen J.A., White O.,

Salzberg S.L., Smith H.O., Venter J.C., Fraser C.M.;

Teyidence for lateral gene transfer between Archaea and Bacteria fr

genome sequence of Thermotoga maritima.";

Nature 399:33-329(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Complete SEQUENCE
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01-JUL-1997 (TrEMBLrel. 04, Created)
01-JUL-1997 (TrEMBLrel. 04, Last sequence up
01-MAR-2002 (TrEMBLrel. 20, Last annotation
Hypothetical 163.4 kDa protein.
E0414.7.
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NCBI_TaxID=2336;
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STRAIN-BRISTOL N2;
MEDLINE-99069613; PubMed-9851916;
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Rhabditidae; Peloderinae;
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SEQUENCE FROM N.A.
STRAIN-BRISTOL N2;
Sammons L., Wohldmann P., Rohlfing T.;
Sammons L., Wohldmann P., Rohlfing T.;
"The sequence of C. elegans cosmid B0414.";
Submitted (MAY-1997) to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                               Caenorhabditis elegans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE;
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                                                                                                                                                                                                                                   None;
                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID-6239;
                                                                                                                                               "Genome sequence of the nematode C. elegans: a platform investigating biology. The C. elegans Sequencing Consort Science 282:2012-2018(1998).
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PS00211; ABC_TRANSPORTER; UNKNOWN_1.
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85.78;
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annotation update)
in, putative.
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2.9e+02;
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Submitted (JUN-2001) to the EMBL/GenB
-1- SIMILARITY: BELONGS TO THE SER/TH
EMBL; AF003145; AAB57718.1; -.
InterPro; IPR002719; Euk_pkinase.
InterPro; IPR0027290; Ser_thr_pkinase.
Pfam; PF00069; pkinase; I.
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                                                 Pfam; PF00069; pkinase; 1.
Prodom; PD000001; Euk_pkinase; 1.
PROSITE; PS50011; PROTEIN_KINASE_DOM; PROSITE; PS00108; PROTEIN_KINASE_ST; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProDom; PD000001; Euk_pkinase; SMART; SM00220; S_TKC; 1.
                                                                                                                 "Direct Submission.";
Submitted (JUN-2001) to the EMBL/GenBank/DDBJ
EMBL; AF003145; AAK68678.1; -.
                                                                                                                                                                                        Sammons L., Wohldmann The sequence of C. el Submitted (MAY-1997) t
                                                                                                                                                                                                                       STRAIN-BRISTOL
                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. STRAIN-BRISTOL N2; MEDLINE-99069613;
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Rhabditidae; Peloderinae;
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                                        ATP-binding; Transferase
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                                                                                                                                                                                                                                                     Genome sequence of the nematode C. Investigating biology. The C. elegan Science 282:2012-2018(1998).
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TRAIN-BRISTOL N2;
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                                                                                            IPR000719; Euk_pkinase.
IPR002290; Ser_thr_pkinase
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                               1420
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(TIEMBLrel. 19, Last sequence update)
(TIEMBLrel. 20, Last annotation updat
1 protein B0414.7b.
                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
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elegans cosmid B0414.";
) to the EMBL/denBank/DDBJ databases
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 Score
Pred.
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                               6B6BFE0902F021C0 CRC64;
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Ra Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,

Ra Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.

Ra Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibegwam C.,

Ra Jalali M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A.,

Ra Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,

Ra Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,

Ra Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,

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Ra Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,

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Ra Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,

Ra Kimmel B.E., Kodira C.D., Kraft C., McDecod M.P., McPherson D.,

Ra Kimmel B.E., McIntosh T.C., McLeod M.P., McPherson D.,

Ra McIkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A.,

Ra McIkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A.,

Ra McIkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A.,

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Ra McIkulov G., Milshina N.V., Mobarry C., Morris J., Wallon K.,

Ra McIkulov G., Milshina N.V., Mobarry C., Morris J., Wallon K.,

Ra McIkulov G., Milshina N.V., Mobarry C., Morris J., Wallon K.,

Ra McIkulov G., Milshina N.V., Mobarry C., Morris J., Wallon N.,

Ra McIkulov G., Mi
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Q9VZ73;
Q1-MAY-2000
Q1-MAY-2000
Q1-JUN-2002
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Fosler C., Ga
Glodek A., Go
                                                                   Stapleton M., Brokstein P., Hong L., Agbayani A., Carlson J., Champe M., Chavez C., Dorsett V., Dresnek D., Farfan D., Filse E., George R., Gonzalez M., Guarin H., Kronmiller B., Li P., Liao G., Miranda A., Mungall C.J., Nunco J., Pacleb J., Paragas V., Park S., Patel S., Phouanenavong S., Wan K., Yu C., Lewis S.E., Rubin G.M.,
                                                                                                                                                                                                                                                       Shue B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T., Spier E., Spradling A.C., Stapleton M., Strong R., Sun E., Sylrskas R., Tector C., Turner R., Venter E., Wang A.H., Wang X., Wang Z.-Y., Wassarman D.A., Weinstock G.M., Weissenbach J., Williams S. M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A., Ye J., Yeh R.-F., Zaveri J.S., Zhan M., Zhang G., Zhao Q., Zheng Ye J., Yeh R.-F., Zaveri J.S., Zhan M., Zhu S., Zhu X., Smith Gibbs R.A., Myers E.W., Rubin G.M., Venter J.C., "The genome sequence of Drosophila melanogaster."; Science 287:2185-2195(2000).
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Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
Borkova D., Botchan M.R., Bouck J., Broksteiln P., Brottler P.,
Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra
Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
de Pablos B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,
Dodson K., Doup L.E., Downes M., Dugan Rocha S., Dunkov B.C., Dunn
Durbin K.J., Evangelista C.C., Ferraz C., Ferriera S., Fleischmann
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                                                Patel S., P
Celniker S.
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Pterygota;
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(MAR-2002) to
ION: CATALYZES
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Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
a; Drosophilidae; Drosophila.
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>tein (AT26201p).
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  UBIQUITIN
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Baldwin D.,
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Length, 499;

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Gaps

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RESULT 8
Q9RH82
ID Q9RH 82
ID Q9RH AC Q9RH
DT 01-y
DT 01-y
DT 01-y
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DE Rod
GN MREC
OS Psec
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OC Psec
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RN [1]
RN [1]
RN [1]
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RN SEQU
RC STRU
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SO SEQ
RESULT 9
Q9AZE
ID Q9AZE
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DT 01-J
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CS Lact
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Best Local S
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Best Local S
Matches 6
                                                                                              09AZC6
09AZC6;
01-JUN-2001
01-JUN-2001
01-JUN-2001
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EMBL; ACRO3463; AAF47953.1; -.
HSSP; P15731; 1QCO.
F19Base; FBgn0035584; CG17030.
InterPro; IPR000608; UBQ_conjugat.
Pfam; PF00179; UQ_con; 1.
ProDom; PD000461; UBQ_conjugat; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          O9RH82 PRELIMINARY; PRT; 366 AA.

O9RH82;
O1-MAY-2000 (TrEMBLrel. 13, Created)
O1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
O1-JUN-2002 (TrEMBLrel. 21, Last annotation update)
                                                            Putative portal ORF500.
                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases EMBL; AF063934; AAF22468.1; -
InterPro; IPR005223; MreC.
TIGRRAMS; TIGR00219; mreC; 1.
SEQUENCE 366 AA; 39203 MW; 8815E4DF05BBCB56 CRC64;
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SMART; SMO0212; UBICG; 1.
PROSITE; PS50127; UBIQUITIN_CONJUGAT_2;
Ligase; Ubiquitin conjugation.
Ligase; Ubiquitin 21335 MW; 78543FDB
                          Viruses.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pseudomonas fluorescens.
Bacteria; Proteobacteria;
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SMART; SM00212;
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"mre locus in Pseudomonas fluorescens !
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN-MFO;
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                                          actobacillus
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nes 6; Conservative
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CATALITIC ACTIVITY: ATP + UBIQUITIN + PROTEIN LYSINE - DIPHOSPHATE + PROTEIN N-UBIQUITYLLYSINE.

PARHWAY: SECOND STEP IN UBIQUITIN CONJUGATION.

MISCELLANEOUS: A CYSTEINE RESIDUE IS REQUIRED FOR UBIQUITHOLESTER FORMATION (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                ELEDKQN 7
                                                                                                                                                                                                                                                                          EAEDKON 294
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6; Conserv
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1 (TrEMBLrel.
1 (TrEMBLrel.
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                                                                                                                                                                             PRELIMINARY;
                                        johnsonii
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17,
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Last sequence update)
Last annotation updat
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Pred. No.
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Pred. No.
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MFO: regulation by growth
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1.5e+02;
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77;
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                                                                                                update)
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                    RESULT 1
023544
ID 023544
ID 025
AC 022
AC 027
DT 011
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DT 011
DT 011
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DT 012
DT 012
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Q93YI4
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Best Local Similarity
Matches 6; Conserv
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                                                                                                                                                                                                                                                                      023544; 023543;
01-JAN-1998 (TIEMBLIEL 05, Created)
01-JAN-1998 (TIEMBLIEL 05, Last sequence update)
01-DEC-2001 (TIEMBLIEL 19, Last annotation updat
Hypothetical 75.3 kDa protein.
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01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation updat
Hypothetical 73.7 kDa protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Virology 275:294-305(2000).
EMBL; AF195900; AAK27895.1; -.
SEQUENCE 499 AA; 56857 MW;
                                      Bevan M., Stiekema W., Murphy G., Wambutt R., Pohl T., Terryn
Kreis M., Kavanagh T., Entian K.D., Rieger M., James R.,
Pulgdomenech P., Hatzopoulos P., Obermater B., Duesterboft A.,
Jones J., Palme K., Ansorge W., Delseny M., Bancroft I., Mewes
                                                                                                                                                                           Arabidopsis thaliana (Mouse-ear cress).

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosideeurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosideurosids II; Brassicales; Brassicaceae; Capsella.
                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                          AT4G17000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (OCT-2000) to the EMBL/GenBank/DDBJ databases EMBL; AJ299420; CAC82614.1; .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Accarkan A., Schmidt R.H.; "Comparative analysis of the Arabidopsis thaliana and Capsella rubella
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q93YI4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. MEDLINE=20455575; PubMed=10998330;
                                                                                                                                                         NCBI_TaxID=3702;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hypothetical
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657 AA; 7
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71.4%;
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85.7%;
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of the late;
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Pred. No.
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Length 657 Indels

Rosidae;

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eudicots; Rosidae;

Mewes H.W.

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RESULT 13
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Matches 6
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                                                                                                                                           01-AUG-1998
01-AUG-1998
01-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Charlebois R.L., Doolittle W.F., Duguet M., Gaasterland T., Garrett R.A., Ragan M.A., Sensen C.W., Van der Oost J.; "The complete genome of the crenarchaeon Sulfolobus solfata: Proc. Natl. Acad. Sci. U.S.A. 98:7835-7840(2001).

EMBL; Y18930; CAB57754 1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.

STRAIR-ATCC 35092 / DSM 1617 / P2;

MEDLINE-21332295; PubMed-11427726;

She Q., Singh R.K., Confalonieri F., Zivanovic Y., Allard G Awayez M.J., Chan-Welher C.C.-Y., Clausen I.G., Curtis B.A. De Moors A., Erauso G., Fletcher C., Gordon P.M.K., Heikamp-de Jong I., Jeffries A.C., Kozera C.J., Medina N., Thi-Ngoc H.P., Redder P., Schenk M.E., Theriault C., Tolstr Thi-Ngoc H.P., Redder P., Schenk M.E., Theriault C., Tolstr
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Submitted (MAR-2000) to the
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                     Bacteria; Proteobacteria;
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Predicted protein.
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Plasmid.
SEQUENCE 293 A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE-21295118; PubMed-11402007; Snellings N.J., Popek M., Lindler I "Complete DNA Sequence of Yersinia Calcium-Response Plasmid Reveals a
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Total number of hits satisfying chosen parameters:
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 262574 seqs, 29422922 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gapop 10.0 ,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /cgn2_6/ptodata/1/laa/5A_COMB.pep:*
/cgn2_6/ptodata/1/laa/5B_COMB.pep:*
/cgn2_6/ptodata/1/laa/5B_COMB.pep:*
/cgn2_6/ptodata/1/laa/6B_COMB.pep:*
/cgn2_6/ptodata/1/laa/B_CTUS_COMB.pep:*
/cgn2_6/ptodata/1/laa/backfiles1.pep:*
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                    US-08-726-306A-183
US-08-323-170B-2
US-08-323-170B-2
US-08-9610-401-3
US-09-911-822-3
US-09-911-822-3
US-08-965-762-3
US-08-90-172-045-4
US-08-172-045-4
US-08-172-045-2
US-09-172-040A-26
US-08-325-071-61
US-08-325-071-61
US-08-325-071-63
US-08-325-071-63
US-08-325-071-63
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US-08-325-071-63
US-08-461-004A-63
US-08-461-004A-63
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Sequence 183, App
Sequence 2, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 33, Appl
Sequence 33, Appl
Sequence 4, Appli
Sequence 2, Appli
Sequence 6, Appli
Sequence 6, Appli
Sequence 65, Appl
Sequence 65, Appl
Sequence 65, Appl
Sequence 59, Appl
Sequence 59, Appl
Sequence 59, Appl
Sequence 50, Appl
Sequence 51, Appl
Sequence 52, Appl
Sequence 53, Appl
Sequence 57, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                           Description
                                                    CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/726,306A
FILING DATE: 02-Oct-1996

PRIOR APPLICATION DATA:

APPLICATION NUMBER: GB 95/20080.4
FILING DATE: 02-Oct-1995

PRIOR APPLICATION NUMBER: US 60/009,832
FILING DATE: 01-Oan-1996

FILING DATE: 01-Oan-1996

ATTORNEY/AGENT INFORMATION:
NAME: WILLIAMS, Ph.D., KAThleen M.
REGISTRATION NUMBER: 96,048-A (32
REFERENCE/DOCKET.NUMBER: 96,048-A (32
RETELEPHONE: (617) 345-9100

TELEPAX: (617) 345-9101

INFORMATION FOR SEQ ID NO: 183:
SEQUENCE CCHARACTERISTICS:
LENGTH: 160 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: unknown

MOLECULE TYPE: peptide
US-08-726-306A-183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1
US-08-726-306A-183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 183, Application Patent No. 5958684
    Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb COMPOTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WordPerfect 6.1

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: van Leeuwen, Frederik Willem
APPLICANT: Burbach, Johannes Peter Henri
APPLICANT: Grosvedd, Franklin G.
TITLE OF INVENTION: DIAGNOSIS METHOD AND REAGENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 1 Fincilly: Boston STATE: MA COUNTRY: US ZIP: 02111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Banner & Witcoff, Ltd STREET: 1 Financial Center
      Conservative
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US-07-987-272A-1
US-07-987-272A-1
US-07-987-272A-16
US-09-385-441-1
US-09-145-828A-2
US-09-014-969-21
US-09-014-969-21
US-09-268-195C-23
US-09-268-195C-23
US-09-83-502-11
US-08-93-4-930-4
US-08-93-4-930-4
US-08-93-11-16
US-08-93-176-18
US-09-227-721-18
US-09-227-721-18
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                    Score 32; DB Pred. No. 17;
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      Mismatches
                                   2;
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                                   Length 160;
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Result No.

Score

2222222211111111098

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Gaps

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Minimum Maximum

B B

seq seq

Searched:

Sequence

Appl

5, Appli 7, Appli 16, Appli 21, Appli 22, Appli 21, Appli 21, Appli 23, Appli 23, Appli 23, Appli 24, Appli 41, Appli 11, Appli

Scoring table:

Title: Perfect score:

Post-processing:

Database

KKVHEE

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US-08-954-441-2
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                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 83.3
Conservative
                                                          APPLICANT: Kaslow, D
TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NFORMATION FOR SEQ
                                                                                                                                                       quence 2, Application US/08954441 tent No. 6316000
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tent No. 573
                                                                                                                                           ENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: 11
MOLECULE TYPE:
                                             CORRESPONDENCE
                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 01
PELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DRRESPONDENCE ADDRESS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER: P-41,261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 29-JAN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ODRESSEE:
                              DRESSEE:
                REET:
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San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                  amino acid
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                                                                                                           Williamson, Kim C.
Kaslow, David C.
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             Townsend and Townsend and Crew LLP to Embarcadero Center, Eighth Floor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ID NO:
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                                                                           Cloning and Expression of Plasmodium faliciparum Transmission-Blocking Ta
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US 08/010,409
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Pred. No. 4.5e+02;
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                                                                              Pfs230
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; SOFTWARE: PatentIn Ver.
; SEQ ID NO 3
; LIENGTH: 466
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-610-401-3
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Best Local Similarity
Watches 5; Conserve
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                                                          Best Local Similarity 83. Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                       Sequence 3, Application US/09610401 Patent No. 6417336
                                                                                         Query Match
                                                                                                                                                                                                                              CURRENT FILING DATE: 2000-07-05
PRIOR APPLICATION NUMBER: JP 11-193235
PRIOR FILING DATE: 1999-07-07
                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
                                                                                                                                                                                                                    NUMBER OF SEQ
                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                             ILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                              ITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2556 KKIHEE 2561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 3135 amino aci
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APPLICATION NUMBER: US 08/323,170
FILING DATE: 13-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION: TELEPHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
235 KKLHEE 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Einhorn, Gregory
REGISTRATION NUMBER: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 KKVHEE 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn
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                           1 KKVHEE 6
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                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/09/610,401
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NAKANISHI,
                                                                                                                                                                                                                                                                                                                           SHIBATA, Takehiko
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3135 amino acids
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Pred. No. 4.5e+02;
                                                                          Score 29;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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PRIOR APPLICATION NUMBER: US 08/965,762
PRIOR FILING DATE: 1997-11-07
NUMBER OF SEQ ID NOS: 35
SOFTMARE: FastSEQ for Windows Version 3.0
SEQ ID NO 33
LENGTH: 68
TYPE: PRT
ORGANISM: Aspergillus nidulans
US-09-911-927-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Watches 5; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: PRT
; ORGANISM: Aspergillus nidulans
US-09-911-882-33
                                                                                                                                                                                                                                                                                                                                                                                                     US-08-965-762-33
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                                                                                                                                           GENERAL INFORMATION: Y19al
APPLICANT: KO1tin, Y19al
APPLICANT: GAVTIAB, Victoria
TITLE OF INVENTION: ESSENTIAL FUNGAL GENES
FILE REFERENCE: 07334/062001
                                                                                                                                                                                                                                                                                                                                 Sequence 33, Application US/08965762 Patent No. 6280963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 35
SOFTWARE: FRASTSEQ for Windows Version 3.0
SEQ ID NO 33
LENGTH: 68
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TITLE OF INVENTION: ESSENTIAL FUNGAL GENES AND THEIR USE
FILE REFERENCE: 06286-062003
CURRENT APPLICATION NUMBER: US/09/911,927
CURRENT FILING DATE: 2001-07-23
PRICE APPLICATION TO STANDARD APPL
                                                                       CURRENT APPLICATION NUMBER: US/08/965,762
CURRENT FILING DATE: 1997-11-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/911,882
CURRENT FILING DATE: 2001-07-23
PRIOR APPLICATION NUMBER: US 08/965,762
PRIOR FILING DATE: 1997-11-07
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APPLICANT: GAVYIAS, Victoria
TITLE OF INVENTION: ESSENTIAL FUNGAL GENES AND THEIR USE
FILE REFERENCE: 06286-062004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       quence 33, Application US/09911882
tent No. 6465198
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FastSEQ for Windows Version 3.0
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Pred. No.
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Pred. No.
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Query Match
Best Local Similarity
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; MOLECULE TYPE:
US-08-007-107-2
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COUNTRY:
ZIP: 32606
ZIP: 32606
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PC-DOS/MS-DOS
COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity bo...
""" ches 5; Conservative
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LENGTH: 69
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 904-372-5800 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
TELEPHONE: 904-375-8100
TELEFAX: 904-372-5800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: Sallwanchik, David R.
REGISTRATION NUMBER: 31,794
REFERENCE/DOCKET NUMBER: UF
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TITLE OF INVENTION:
525 KKTHEE 530
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                                                                                                                                                                                                                                                                                                       TYPE: AMINO ACID
STRANDEDNESS: Sin
                                                         1 KKVHEE 6
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2421 N.W. 41st Street, Suite A-1
                                                                                                                                                                                                                                                                                                                                                                          535 amino acids
                                                                                                                     Conservative
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Pred. No.
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d Tolerance and
                                                                                                                                                                   Length 535;
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RESULT 9 US-09-172-045-4 ; Sequence 4, Application US/09172045 ; Patent No. 6277594

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CURRENT FILING DATE: 1998-10-08
EARLIER APPLICATION NUMBER: JP98/86979
EARLIER FILING DATE: 1998-03-31
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ARLIER APPLICATION NUMBER: JP98/121456
ARLIER FILING DATE: 1998-04-30
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ORGANISM: Artificial Sequence
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             ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J J
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0321 US
                                                                                                                                                                                                       OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                              CLASSIFICATION: 435 PRIOR APPLICATION DATA:
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ELECOMMUNICATION INFORMATION:
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                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                     APPLICATION NUMBER:
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5. 5885803
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                                                                                                                                                                                                                                                                                                                                     USA
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                                                                                                                                                                                                                                                          IBM Compatible
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100.0%; Pred. No.
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Best Local Similarity
Matches 5; Consery
                                                 NFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 448 amino acids
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                                                                                                                                                                                                                                                                     SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/272,796
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LIBRARY: TBLYN
                                                                                                                     REFERENCE/DOCKET NUMBER: PF
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-855-0555
                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
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MMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                     COMPUTER: IBM COMPONENTING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 3174 POR CITY: Palo Alto
                                                                                                                                                                                                                                           FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                  ZIP: 94304
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                                    TYPE: amino acid
                                                                                                                                                         NAME: Billings, Lucy J J
REGISTRATION NUMBER: 36,749
                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
                        STRANDEDNESS:
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                                                                                                          415-845-4166
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           linear
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 26
; LENGTH: 494
; TYPE: PRT
; ORGANISM: Rattus norvegicus
US-09-126-420A-26
                                                   ) ORGANISM: Homo sapiens
US-09-344-700-4
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US-09-126-420A-26
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Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                Sequence 4, Application US/09344700 Patent No. 6265194
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Best Local :
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                                                                                                                                                              APPLICANT: Nezu, Jun-Ichi
APPLICANT: Oku, Asuka
APPLICANT: Oku, Asuka
APPLICANT: Oku, Asuka
TITLE OP INVENTION: NOVEL SERINE-THREONINE KINASE GENE
FILE REFERENCE: 06501/033001
CURRENT APPLICATION NUMBER: US/09/344,700
CURRENT FILING DATE: 1999-06-25
EARLIER APPLICATION NUMBER: US/097/0485
EARLIER FILING DATE: 1997-12-25
EARLIER APPLICATION NUMBER: US/0357864
EARLIER APPLICATION NUMBER: US/0357864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: FITTLE OF INVENTION: FITTLE OF INVENTION: FITTLE OF INVENTION:
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                                                                                                                 SOFTWARE: FastSEQ for Windows Version 4.0 EQ ID NO 4
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                                                                                                   ENGTH: 508
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o. 6376753
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WERCK-REICHART, DANIELE
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ROBINEAU, TIBURCE
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   84.4%;
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100.0%; Pred. No
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MOLECULE TYPE: 18-08-325-071-61
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                                                                                       TELEX: 904136
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 07/926,368 FILING DATE: 07-AUG-1992 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA: APPLICATION NUMBER:
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MEDIUM TYPE: Floppy disk
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                                                        SEQUENCE CHARACTERISTICS LENGTH: 549 amino aci
                                                                                                                                     TELECOMMUNICATION INFORMATION:
TELEPHONE: 202 672 5300
                                                                                                                                                                                                               FILING DATE: 27-NOV-1986 ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER: 1
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                                                                                                              TELEPHONE: 202 672 5399
                                                                                                                                                                  NAME: BENT, Stephen A. REGISTRATION NUMBER: 29. REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/UI FILING DATE: 14-OCT-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
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                              TOPOLOGY:
                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                       06-JUL-1988
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                                                                                                                                                                                                                                                                                                                                                                        JMBER: PCT/AU87/00401
27-NOV-1987
                                                                                                                                                                                                                              IMBER: AU PH9196
27-NOV-1986
                                                                                                                                                                                                                                                                                                                           16-OCT-1987
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19-JUN-1987
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                                                                                                                                                                                                                                                                                                                                            AU PI4912
                                                                                                                                                                                                                                                                                                                                                                                                                                      07/242,196
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RESULT 15
US-08-461-004A-61
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Best Local S
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION NOTA:
APPLICATION NUMBER: US/08/461,004A
FILING DATE: 04-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/325,071
FILING DATE: 19-OCT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/325,071
FILING DATE: 19-OCT-1994
PRIOR APPLICATION DATA:
APPLICATION UMBER: US 08/062,109
FILING DATE: 17-MAY-1993
DESIGNATION DATA: US 08/062,109
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Patent No. 6235283
INFORMATION FOR SEQ ID NO:
                                          REFERENCE/DOCKET NUMBER: 29,768
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202 672 5300
TELEPRONE: 202 672 5300
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APPLICATION NUMBER: AU PI4912
FILING DATE: 16-OCT-1987
PRIOR APPLICATION DATA:
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FILING DATE: 06-JUL-1
PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: 19-JUN-PRIOR APPLICATION DATA:
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                                                                                                                                                       APPLICATION NUMBER: AU PH9196 FILING DATE: 27-NOV-1986 TTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ITLE OF INVENTION: DNA Encoding A Cell Membrane ITLE OF INVENTION: Glycoprotein Of A Tick Gut
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 07/926,368 FILING DATE: 07-AUG-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: USA
ZIP: 20007-5109
                                                                                                                 NAME: BENT, Stephen A. REGISTRATION NUMBER: 2
                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: PCT/AU87/00401
FILING DATE: 27-NOV-1987
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3000 K Street, N.W.
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SRISKANTHA, Alagacone
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                                                                                                                                                                                                                                        UMBER: AU PI2570
19-JUN-1987
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06-JUL-1988
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Keith No. 6235283man
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Pred. No.
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Search completed: November 13, 2002, 13:18:07 Job time: 8,68085 secs
                                                                                          Query Match
Best Local Similarity 83.3
""+"ches 5; Conservative
                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 549 amino acids
                                                       217 KKCHEE 222
                                                                                                                                                                                                TYPE: amino acid
TOPOLOGY: linear
                                                                           1 KKVHEE 6
                                                                                                                                                                                                                         LENGTH:
                                                                                                                           Score 27; DB 4;
Pred. No. 5.2e+02;
                                                                                                              Mismatches
                                                                                                           1; Indels
                                                                                                                                       Length 549;
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Result
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq
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Perfect score:
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length: 2000000000
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/cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
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/cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10_PUBCOMB.pep:*
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           US-09-923-779-155
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US-09-864-761-42664
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US-09-864-761-34168
US-09-864-761-346614
US-09-864-761-37686
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34684, A
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US-09-923-779-155
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26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
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9-736-969A	9-828-42	15-24	15-242-4	9-903-023	-09-903-19	-09-903-216	-09-903-063	59-604	-09-903-248	-09-815-242	-052-586	-09-943-851A	-09-944-654-5	-09-943-762-5	-09-944-432-5	44-097-	9-944-396-5	9-945-015-5	9-945-587-	9-944-862-5	9-944-457-	44-449-5	9-866-028-5	-09-944-403-5	44-413-5
D	Sequence 1, Appli	e 10764,	Sequence 4882, Ap	6 2	e 2, Appl	e 2	e 2	e 2, Appl	e 2,	e 51	e 60	e 55	e 55	SS		55	e 55	e 55	e 55	e 55	e 55	e 55	e 55	Š	55,

ALIGNMENTS

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NUMBER OF SEQ ID NOS: 155
SOFTWARE: FastSEQ for Win
SEQ ID NO 155
LENGTH: 466
TYPE: PRT
ORGANISM: Homo sapiens
US-09-923-779-155
                                                                                                                                                                  RESULT 2
US-10-152-647-3
; Sequence 3, Application US/10152647
; Patent No. US20020137110A1
; GENERAL INFORMATION:
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APPLICANT: Pyle, Ruth A.

APPLICANT: Xu, Jiangchun

APPLICANT: Kalos, Michael D.

APPLICANT: Kalos, Michael D.

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY

TITLE OF INVENTION: AND DIAGNOSIS OF PANCREATIC CANCER

TILE REFERENCE: 210121.553

CURRENT APPLICATION NUMBER: US/09/923,779

CURRENT APPLICATION NUMBER: US/09/923,779

CURRENT FILING DATE: 2001-08-06

CORRENT FILING DATE: 2001-08-06
                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 5; Conserv
  APPLICANT: MORISHIMA, NO. US20020137110A1Uhiro,
APPLICANT: NAKANISHI, Keiko,
APPLICANT: SHIBAZA, Takehiko
TITLE OF INVENTION: Antibody against cleavage product of vimentin
FILE REFERENCE: 522.1004
CURRENT APPLICATION NUMBER: US/10/152,647
CURRENT FILING DATE: 2002-05-21
CURRENT FILING DATE:
                                                                                                                                                                                                                                                                                                                                           235 KKLHEE 240
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APPLICANT: FGHIL, SHALLOW G.

APPLICANT: Hanzel, David K.

APPLICANT: Hanzel, David K.

APPLICANT: Chen, Wensheng

TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR

TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY

FILE REFERENCE: ACCOMICA-Y-1

CURRENT APPLICATION NUMBER: US/09/864,761

CURRENT FILING DATE: 2001-05-23

PRIOR APPLICATION NUMBER: US 60/180,312

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: US 60/207,456

PRIOR APPLICATION NUMBER: US 99/632,366

PRIOR APPLICATION NUMBER: US 99/632,366

PRIOR APPLICATION NUMBER: GB 24263.6

PRIOR APPLICATION NUMBER: GB 24263.6

PRIOR FILING DATE: 2000-10-04

PRIOR FILING DATE: 2000-09-27

PRIOR FILING DATE: 2000-09-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/911,888
CURRENT FILING DATE: 2001-07-23
PRIOR APPLICATION NUMBER: US 08/965,762
PRIOR FILING DATE: 1997-11-07
NUMBER OF SEQ ID NOS: 35
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 33
LENGTH: 68
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                     US-09-864-761-34684
US-09-864-761-34684
; Sequence 34684, Application US/09864761
; Patent No. US20020048763A1
; GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: KOltin, Yigal
APPLICANT: Gavrias, Victoria
TITLE OF INVENTION: ESSENTIAL FUNGAL GENES AND THEIR USE
FILE REFERENCE: 06286-062002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US/09/610,401
PRIOR FILING DATE: 2000-07-05
NUMBER OF SEQ ID NOS: 4
                                                                                                                                                                                                                                                                                                                                     APPLICANT: Penn, Sharron G. APPLICANT: Rank, David R.
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TYPE: PRT
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Pred. No.
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; OTHER INFORMATION:
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US-09-864-761-34684
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SEQ ID NO 3484
LENGTH: 134
TYPE: PRT
                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                              Sequence 146, Application US/09729674 Patent No. US20010039335A1
CURRENT APPLICATION NUMBER: US/09/729,674
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                                     APPLICANT: Fechtel, Kim
APPLICANT: Genetics Institute, Inc.
TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES ENCODING THEM
                                                                                              APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 60/234,687 PRIOR FILING DATE: 2000-09-21
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OTHER INFORMATION: EXPRESSED IN BRAID
OTHER INFORMATION: EXPRESSED IN BRAID
OTHER INFORMATION: EXPRESSED IN BT474
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                                                                                                                          Merberg, David
Treacy, Maurice
Agostino, Michael J.
Steininger II, Robert J.
Spaulding, Vikki
                                                                                          Wong, Gordon G.
Clark, Hilary
                                                                                                                                                                                                                      Evans, Chery
                                                                                                                                                                                                                                       Collins-Racie,
                                                                                                                                                                                                                                                      McCoy, John M.
Lavallie, Edward
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83.3%;
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IN BRAIN, SIGNAL = 3.4
IN BT474, SIGNAL = 5.3
IN ADULT LIVER, SIGNAL = 1.4
I HIT: AA196127.1, EVALUE 2.00e-25
HIT: Q28820, EVALUE 5.60e-01
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Pred. No.
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US-09-864-761-42664
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; ORGANISM: Helicobacter pylori
US-09-881-752A-206
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Best Local Similarity
Watches 5; Conserve
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; LOCATION: (379)
US-09-729-674-146
                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 206
                                                                                                                                                              Sequence 42664, Application US/09864761 Patent No. US20020048763A1
                                      APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/881,752A CURRENT FILING DATE: 2001-06-15 PRIOR APPLICATION NUMBER: US 08/833,457 PRIOR FILING DATE: 1997-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 28
SOFTWARE: PatentIn Ver.
EQ ID NO 146
LENGTH: 398
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                                FILE REFERENCE: Aeomica-X-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING
CURRENT APPLICATION NUMBER: US/09/864,761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PPLICANT: Oomen, Raymond P.
TITLE OF INVENTION: Identification of Polynucleotides
TITLE OF INVENTION: Encoding No. US20020115078Alel Helicobacter Polypeptides in
TITLE OF INVENTION: Genome
TITLE OF INVENTION: Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              quence 206, Aptent No. US200
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Oomen, Raymond P.
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20020115078A1
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83.3%;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
16 QKIHEE 21
                               1 KKVHEE 6
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APPLICATION NUMBER: US 60/234,687
FILING DATE: 2000-09-21
APPLICATION NUMBER: US 09/608,408
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PLICATION NUMBER: US 09/632,366
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IN HBL100, SIGNAL = 0.86
IN BT474, SIGNAL = 0.65
IN HELA, SIGNAL = 0.7
                                                                                                                                                                                                                                   IN LUNG, SIGNAL = 0.7
IN ADULT LIVER, SIGNAL = 0.67
IN BRAIN, SIGNAL = 1.7
IN PLACENTA, SIGNAL = 0.7
                                                                                Score 27;
Pred. No.
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12;
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Sequence 47501, Application US/09864761 Patent No. US20020048763A1

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INFORMATION:

APPLICANT:

Penn, Sharron G. Rank, David R.

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                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                              Sequence 39889, Application US/09864761 Patent No. US20020048763A1
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Best Local :
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                                    APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K
APPLICANT: Chen, Wensheng
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SOFTWARE: Annomax Sequence
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PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 09/632, 366
PRIOR FILING DATE: 2000-08-03
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TYPE: PRT
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       ITLE
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JRRENT FILING DATE: 2001-05-23
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   OF INVENTION:
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                                    Hanzel, David K.
Chen, Wensheng
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llarity 100.0%;
Conservative
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EXPRESSED IN ADULT LIVER, SIGNAL = 9.9

SWISSPROT HIT: Q16696, EVALUE 6.00e-32

EST_HUMAN HIT: AW577399.1, EVALUE 5.00e-25
HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL
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Pred. No. 20;
0; Mismatches
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SOFTWARE: Annomax Sequence
SEQ ID NO 39889
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TYPE: PRT
ORGANISM: Homo :
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CURRENT FILING DATE: 2001-05-23
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                     1 KKVHEE 6
9 KRVHQE 14
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APPLICATION NUMBER: PCT/US01/00666
FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00667
FILING DATE: 2001-01-30
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FILING DATE: 2001-01-30
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FILING DATE: 2001-01-30
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APPLICATION NUMBER: US 60/236,359
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4; Conserv
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N: EXPRESSED IN HELA, SIGNAL = 6.9

N: EXPRESSED IN BRAIN, SIGNAL = 6.9

N: EXPRESSED IN ADULT LIVER, SIGNAL = 3.7

N: EXPRESSED IN HEART, SIGNAL = 3.2

N: EXPRESSED IN LUNG, SIGNAL = 4

N: EXPRESSED IN FETAL LIVER, SIGNAL = 3.4

N: EXPRESSED IN BONE MARROW, SIGNAL = 3.5

N: EXPRESSED IN BONE MARROW, SIGNAL = 3.5

N: SMISSPROT HIT: Q92599, EVALUE 2.00e-19

N: EST_HUMAN HIT: BE748158.1, EVALUE 2.00e-18
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                                                                                        Score 26;
Pred. No.
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                                                                                                            Length 64;
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US-09-864-761-34168 US-09-864-761-34168, Application US/09864761 ; Sequence 34168, Application US/09864761 ; Patent No. US20020048763A1

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US-09-864-761-34168
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PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR FILING DATE: 2000-09-27
PRIOR PELICATION NUMBER: PCT/US01/00666
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00667
PRIOR APPLICATION NUMBER: PCT/US01/00664
PRIOR APPLICATION NUMBER: PCT/US01/00664
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-30
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SEQ ID NO 34168
LENGTH: 76
                                                                                          Matches
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CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
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APPLICATION NUMBER: US 09/632,366
REILING DATE: 2000-08-03
APPLICATION NUMBER: GB 24263.6
REILING DATE: 2000-10-04
APPLICATION NUMBER: US 60/236,359
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FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00669
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APPLICATION NUMBER: PCT/US01/00661
FILING DATE: 2001-01-30
FILING DATE: 2001-0
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APPLICATION NUMBER: US 09/608,408
FILING DATE: 2000-06-30
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FILING DATE: 2001-01-30
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ED IN BT474, SIGNAL = 1.3
ED IN FETAL LIVER, SIGNAL = 2.2
ED IN LUNG, SIGNAL = 0.96
ED IN BLACENTA, SIGNAL = 0.98
ED IN HBL100, SIGNAL = 1.4
ED IN ADULT LIVER, SIGNAL = 1.5
ED IN HBARIN, SIGNAL = 1.5
ED IN HBARIN SIGNAL = 1.5
ED IN HBA
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                                                                                          Score 26; DB Pred. No. 40; 2; Mismatches
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HEART, SIGNAL = 1.3
T: Q15811, EVALUE 9.00e-25
T: AA313515.1, EVALUE 5.00e-24
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RESULT 11
US-09-864-761-46614
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SEQ ID NO 46614
Query Match
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APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR FILING DATE: 2000-09-21
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PRIOR FILING DATE: 2000-09-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILE REFERENCE: Aeomica-X-1
CURRENT APPLICATION NUMBER: US/09/864,761
                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 49117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE:
                                                                                                                  OTHER INFORMATION: MAP TO APONO311.1
OTHER INFORMATION: EXPRESSED IN ADDIT
OTHER INFORMATION: EXPRESSED IN PLACE
OTHER INFORMATION: EXPRESSED IN BONE
OTHER INFORMATION: EXPRESSED IN FETAL
OTHER INFORMATION: EXPRESSED IN HELA,
OTHER INFORMATION: EXPRESSED IN HELA,
OTHER INFORMATION: EXPRESSED IN HELA,
                                                                                                                                                                                                                                                                                            ORGANISM: HOMO FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OR PELICATION NUMBER: PCT/USO1/00665
OR FILING DATE: 2001-01-30
OR APPLICATION NUMBER: PCT/USO1/00668
OR FILING DATE: 2001-01-30
OR APPLICATION NUMBER: PCT/USO1/00663
OR APPLICATION NUMBER: PCT/USO1/00662
OR APPLICATION NUMBER: PCT/USO1/00662
OR APPLICATION NUMBER: PCT/USO1/00662
OR FILING DATE: 2001-01-30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: PCT/US01/00664
FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 2000-06-30 APPLICATION NUMBER: US 09/774,203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 09/608,408 FILING DATE: 2000-06-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: PCT/US01/00661 FILING DATE: 2001-01-30
                                                                       INFORMATION:
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David K.
                                                                       EST_HUMAN
SWISSPROT
  81.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                       Listing Engine vers.
                                                                  ED IN ADULT LIVER, SIGNAL = 0.84
ED IN PLACENTA, SIGNAL = 0.61
ED IN BONE MARROW, SIGNAL = 0.88
ED IN FETAL LIVER, SIGNAL = 1
ED IN HELA, SIGNAL = 0.63
ED IN HELA, SIGNAL = 0.82
ED IN HELA, SIGNAL = 0.82
ED IN HIT: AW950164.1, EVALUE 9.00e-24
DT HIT: Q15811, EVALUE 1.00e-24
  Score 26;
                                                                                                SIGNAL = 0.82
.64.1, EVALUE 9.00e-24
     띪
     10;
     Length 82;
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NUMBER OF SEQ ID NOS: 49117

SOFTWARE: Annomax Sequence Listing Engine vers. 1.1

SEQ ID NO 37686

LENCTH: 104

TYPE: PRT

ORGANISM: Homo sapiens

FEATURE:
OTHER INFORMATION: MAP TO ACO12443.1

OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 2.4

OTHER INFORMATION: EXPRESSED IN BT474, SIGNAL = 3.1

OTHER INFORMATION: EXPRESSED IN BT474, SIGNAL = 3.1

OTHER INFORMATION: EXPRESSED IN BT474, SIGNAL = 3.1

OTHER INFORMATION: EXPRESSED IN BT478, SIGNAL = 2.9

OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 2.9

OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 2.9

OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 2.2
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PRIOR FILING DATE: 2000-02-04
PRIOR FILING DATE: 2000-05-26
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR PPLICATION NUMBER: US 09/632,366
PRIOR PILING DATE: 2000-09-03
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR PILING DATE: 2000-09-27
PRIOR PPLICATION NUMBER: PCT/US01/00666
PRIOR APPLICATION NUMBER: PCT/US01/00667
PRIOR APPLICATION NUMBER: PCT/US01/00667
PRIOR APPLICATION NUMBER: PCT/US01/00664
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PRIOR APPLICATION NUMBER: PCT/US01/00661

PRIOR APPLICATION NUMBER: PCT/US01/00670

PRIOR APPLICATION NUMBER: PCT/US01/00670

PRIOR APPLICATION NUMBER: US01-01-30

PRIOR APPLICATION NUMBER: US 09/608,408

PRIOR APPLICATION NUMBER: US 09/774,203

PRIOR APPLICATION NUMBER: US 09/774,203

PRIOR APPLICATION NUMBER: US 09/774,203

PRIOR FILING DATE: 2000-06-30

PRIOR APPLICATION NUMBER: US 09/774,203

PRIOR FILING DATE: 2001-01-29

PRIOR FILING DATE: 2001-01-29
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CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: PCT/US01/00669
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00665
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00663
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PRIOR APPLICATION NUMBER: PCT/US01/00662
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RKLHEE 28
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Chen, Wensheng
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APPLICANT: Abbott Laboratories
APPLICANT: Mukerji, pradip
APPLICANT: Leonard, Amanda Eun-Yeong
APPLICANT: Leonard, Amanda Eun-Yeong
APPLICANT: Huang, Yung-Sheng
APPLICANT: Pereira, Suzette L.
TITLE OF INVENTION: ELONGASE GENES AND USES THEREOF
FILE REFERENCE: 6407.US.P3
CURRENT APPLICATION NUMBER: US/09/903,456
CURRENT FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: US 09/624,670
PRIOR FILING DATE: 2000-07-24
PRIOR APPLICATION NUMBER: US 09/379,095
PRIOR APPLICATION NUMBER: US 09/145,828
PRIOR APPLICATION NUMBER: US 09/145,828
PRIOR FILING DATE: 1999-08-23
PRIOR FILING DATE: 1998-09-02
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US-09-741-669-427
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 29
LENGTH: 283
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
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Patent No. US20020138874A1
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Best Local Similarity
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Best Local Similarity
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CURRENT APPLICATION NUMBER: US/09/741,669
PRIOR ADDITOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: FORSYTH, R. Allyn
APPLICANT: Ohlsen, Karl L.
APPLICANT: Zyskind, Judith W.
APPLICANT: INVENTION: Genes identified as
TITLE OF INVENTION: proliferation of E.
FILE REFERENCE: ELITRA.009A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1999
NUMBER OF SEQ ID NOS: 48
                                                                     NUMBER OF SEQ ID NOS:
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EXPRESSED IN FETAL LIVER, SIGNAL = 2.1
EXPRESSED IN LUNG, SIGNAL = 0.98
EST_HUMAN HIT: AL042120.1, EVALUE 1.00e-33
SWISSPROT HIT: 054786, EVALUE 1.30e+00
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Pred. No.
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Pred. No.
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; COCATION: (318)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KBY: SITE
; NAME/KBY: SITE
; NAME/KBY: (329)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-764-898-281
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; OTHER INFORMATION: Potential Mammalian Elongase
; NAME/KEY: VARIANT
; LOCATION: (282)...(282)
; OTHER INFORMATION: Xaa - Unknown or Other at position 282
US-09-903-456-29
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US-09-764-898-281
Search completed: November 13, 2002, 13:40:19 Job time: 5.22796 secs
                                                                                                                                 Query Match
Best Local Similarity bo.,
"---hes 4; Conservative
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Best Local Similarity 80.0
Matches 4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Prior application data removed - consult PALM or file wrapper NUMBER OF SEQ ID NOS: 311
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 281
LENGTH: 336
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 281, Application US/09764898
PAtent No. US20020090673A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PJZ01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/764,898
CURRENT FILING DATE: 2001-01-17
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                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: SITE (J68)
LOCATION: (168)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (186)
COCHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: SITE
LOCATION: (126)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
                                                                                1 KKVHEE 6
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270 KRVHQE 275
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|:|||
33 KIHEE 37
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HER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
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Pred. No. 1.6e+02;
1; Mismatches 0
                                                                                                                                                              Score 26; DB 10; Length 336; pred. No. 1.9e+02; Mismatches 0; Indels
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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Perfect score:
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seq length: 2000000000
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Gapop 10.0 , Gapext 0.5
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32
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US-09-791-537-94919
US-10-108-260A-0990
US-09-791-537-32570
US-09-791-537-94920
US-09-791-537-94921
US-09-791-537-73564
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	equenc	6 US-10-205-331-5		4	8	32	24
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	equenc	7 US-60-389-987-127		7	8	32	19
	equenc	1 US-09-791-537-8698		7	8	32	18
	equenc	1 US-09-791-537-869		7	8	32	17
	equenc	1 US-09-791-537-8697		7	8	32	16
	egu	1 US-09-791-537-6517		7	8	32	15
	O	1 US-09-791-537-6210		7	00.	32	14
	equen	1 US-09-791-537-4696		7	00.	32	13
	Sequence	7 US-60-412-418-213		σ	80.	32	12
	equenc	7 US-60-389-987-21		₽	8	32	11
	Sequence	1 US-09-791-537-1326		σ'n	8	32	10
	Sequence	1 US-09-791-537-7		σ	00.	32	9
	8	1 US-09-791-537-6236		σ	8	32	80
	Sequence	9 US-09-538-092-948		σ	00.	32	7

ALIGNMENTS

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Sequence 94919, Application US/09791537

[GENERAL INFORMATION:
APPLICANT: Blonomix, Inc.
APPLICANT: Blonomix, Inc.
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REPERENCE: 261/210
[CURRENT FILING DATE: 2001-02-22]
NUMBER OF SEQ ID NOS: 153055
[SOFTWARE: Patentin version 3.0]
SEQ ID NO 94919
[LENGTH: 448]
TYPE: PRT
ORGANISM: Gallus gallus
US-09-791-537-94919

Query Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 KKVHEE 6
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Db 223 KKVHEE 228
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US-10-108-260A-4090
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SOFTWARE: PatentIn Ver. 2.
SEQ ID NO 4090
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CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: Patentin version 3.0
SEQ ID NO 32570
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GENERAL INFORMATION
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                                 SOFTWARE: PatentIn version 3.0 SEQ ID NO 94920 LENGTH: 461
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Sequence 32570, Application US/09791537
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                                                                                    CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
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TYPE: PRT
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ORGANISM: Bos taurus
                                                                                                                                            LE REFERENCE: 261/210
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                                                                                                                                                                                                                                                                                                                                                          224 KKVHEE 229
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LE OF INVENTION: THREE I
LE OF INVENTION: METHOI
DESCRIPTION: JOY 1010
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LE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBI
LE OF INVENTION: METHODS OF USE THEREOF
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                                            Query Match
Best Local Similarity
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SEQ ID NO 73564
LENGTH: 463
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SEQ ID NO 94921
LENGTH: 462
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Matches 6; Conserv
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                                                                                                                                                                                                                                                        FILE REFERENCE: 261/210
                                                                                                                                                                                                                                                                      APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY N
TITLE OF INVENTION: METHODS OF USE THEREOF
                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 153055
                                                                                                                                                   TYPE: PRT
                                                                                                                                                                                                                                                                                                                                    APPLICANT: Bionomix, Inc.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PPLICANT: Danzer, Joseph
ITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MILE OF INVENTION: METHODS OF USE THEREOF
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231 KKVHEE 236
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Pred. No. 1e+03;
                                                            Mismatches
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RESULT 7
US-09-538-092-948
US-09-538-092-948
; Sequence 948, Application US/09538092
; GENERAL INFORMATION:

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TITLE OF INVENTION: Protein-Protein Complexe
FILE REFERENCE: 15966-542
CURRENT APPLICATION NUMBER: US/09/538,092
CURRENT FILING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: 60/127,352
PRIOR FILING DATE: 1999-04-01
PRIOR FILING DATE: 1999-04-01
PRIOR FILING DATE: 2000-02-01
NUMBER OF SEQ ID NOS: 1387
SOFTWARE: CURAPATS GOFTMARE: CURAPATS GFORMATTER TO 948
LENGTH: 469
TYPE: PRT
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                                                                                                                                                                                                           US-09-791-537-73566
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US-09-791-537-62363
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Best Local Similarity 100.0%;
Matches 6; Conservative C
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Best Local 9
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APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
CURRENT FILLIAG DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
                                                                                                                  APPLICANT: Bionomix, Inc.
APPLICANT: Debe, Derek
APPLICANT: Danzer, Josep
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CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
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TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBI
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
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LOCATION: (0)...(0)
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llarity 100.0%;
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Pred. No. 1e+
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Pred. No. 1e+03;
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APPLICANT: Gibson, Bradford W.
APPLICANT: Taylor, Steven W.
APPLICANT: Glenn, Gary M.
APPLICANT: Glenn, Gary M.
APPLICANT: Warnock, Dale E.
TITLE OF INVENTION: TARGETS FOR THERAPEUTIC INTERVENTION
TITLE OF INVENTION: IDENTIFIED IN THE MITOCHONDRIAL PROTEOME
FILE REFERENCE: 660084 465P2
CURRENT APPLICATION NUMBER: US/60/389,987
CURRENT FILING DATE: 2002-06-17
NUMBER OF SEQ ID NOS: 3025
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 213
LENGTH: 469
TYPE: PRT
ORGANISM: Homo sapiens
US-60-389-987-213
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Query Match
Best Local Similarity
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SOFTWARE: Patentin version 3.0
SEQ ID NO 132613
LENGTH.
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Best Local Similarity
Matches 6; Conserv
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Best Local Similarity
Matches 6; Conserv
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SEQ ID NO 73566
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TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
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TYPE: PRT
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                                Score 32; DB 27
Pred. No. 1e+03;
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Pred. No. 1e+03;
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239

KKVHEE 6 |||||| KKVHEE 244

Sequence 213, Application US/60412418

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Query Match
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Sequence 46962, Application US/09791537
GENERAL INFORMATION:
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                  US-09-791-537-62106

US-09-791-537-62106;

Sequence 62106; Application US/09791537;

GENERAL INFORMATION:
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US-60-412-418-213
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Best Local Similarity 100.0%;
Matches 6; Conservative (
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CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
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APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE I
TITLE OF INVENTION: METHOI
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APPLICANT: Bionomix, Inc
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ITLE OF INVENTION: TARGETS FOR THERAPEUTIC INTERVENTION

ITLE OF INVENTION: IDENTIFIED IN THE MITOCHONDRIAL PROTEOME
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2002-09-20
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Pred. No. 1e+03;
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Search completed: November 13, 2002, 13:39:18
Job time: 121.383 secs
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Best Local Similarity
Matches 6; Conserv
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CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: Patentin version 3.0
SEQ ID NO 65178
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Best Local Similarity
Matches 6; Conserv
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TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY PROTEIN OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
CURRENT FERENCE: 261/210
CURRENT FILING DATE: 2001-02-22
RUMBER OF SEQ ID NOS: 153055
                                                                                                                                                                                                                                                                                                                                           APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY
TITLE OF INVENTION: METHODS OF USE THEREOF
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TYPE: PRT
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Pred. No.
                                                                                                                                             Score 32;
Pred. No.
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Result
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Maximum DB
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Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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seq length: 2000000000
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32
1 KKVHEE 6
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Match
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100.6
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29.431 Million cell updates/sec
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Gapop 10.0 , Gapext 0.5
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         GenCore version 5.1.3
Copyright (c) 1993 - 2002 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                       US-09-856-086-5
US-09-815-096-7
US-09-815-096-7
US-09-513-999-7-614
US-10-141-531-85
US-10-141-531-123
US-10-141-531-123
US-10-141-531-123
US-10-141-531-139
US-10-141-531-139
US-10-141-531-139
US-10-141-531-157
US-10-141-531-166
US-10-141-531-184
US-10-141-531-184
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US-10-141-531-184
US-10-141-531-193
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Sequence 5, Appli
Sequence 7, Appli
Sequence 7614, App
Sequence 66, Appl
Sequence 85, Appl
Sequence 85, Appl
Sequence 113, App
Sequence 112, App
Sequence 114, App
Sequence 157, App
Sequence 157, App
Sequence 164, App
Sequence 175, App
Sequence 193, App
Sequence 194, App
Sequence 193, App
Sequence 193, App
Sequence 70, Appl
Sequence 71, Appl
Sequence 2018, App
Sequence 2018, Appl
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25 78.1 114 6 US-10-24-2744 Sequence 274. Application 15 76.1 117 6 US-10-24-277	7 26 81.2 694 6 US-10-125-923A-60 Sequence 60 8 26 81.2 804 6 US-10-092-411A-5218 Sequence 52: 9 26 81.2 1713 6 US-10-270-333-177 Sequence 17

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; OTHER INFORMATION: Xaa-Cys or Phe or His or Ile or Leu or Asn or Pro or Arg or US-09-513-999C-7614
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CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR FILING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
SOFTWARE: PAtent.pm
SEQ ID NO 7614
LENGTH: 76
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                                     APPLICANT: Muchhal, Umesh
TITLE OF INVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activity
FILE REFERENCE: A-714.57-2/RFT/RMS/RMK
CURRENT APPLICATION NUMBER: US/10/141,531
CURRENT FILING DATE: 2002-05-06
PRIOR APPLICATION NUMBER: US 60/370,609
PRIOR FILING DATE: 2002-04-05
PRIOR APPLICATION NUMBER: US 60/289,029 PRIOR FILING DATE: 2001-05-04
                                                                                                                                                                                                                               APPLICANT: Briggs, Stèven P.
APPLICANT: Dalmia, Bipin K.
APPLICANT: del Val, Greg
APPLICANT: Desjarlais, John R.
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PPLICANT: Glordano, J.Y.
TILE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
TLE REFERENCE: 59.US2.REG
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LOCATION: 4
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les 5; Conserv
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; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 66
; LENGTH: 315
; TYPE: PRT
; ORGANISM: Bacillus subtilis
US-10-141-531-66
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Best Local Similarity
"-+-hes 4; Conserv
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US-10-141-531-23
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                                              APPLICANT: Heifetz, Peter
APPLICANT: Luginbuhl, Peter
APPLICANT: Muchhal, Umesh
TITLE OF INVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activit
FILE REFERENCE: A-71457-2/RFT/RMS/RMK
CURRENT APPLICATION NUMBER: US/10/141.531
CURRENT APPLICATION NUMBER: US/60/370,609
PRIOR APPLICATION NUMBER: US 60/370,609
PRIOR FILING DATE: 2002-04-05
PRIOR FILING DATE: 2002-04-05
PRIOR FILING DATE: 2002-04-05
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APPLICANT: Dalmia, Bipin K.
APPLICANT: del Val, Greg
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APPLICANT: Dalmia, Bipin K.
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URRENT FILING DATE: 2002-05-06
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SEQ ID NOS: 208
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                                 US 60/289,029
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Pred. No.
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Pred. No.
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                                                                                                                                                                                                                                                                                                         US-10-141-531-103
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LENGTH: 316
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Best Local Similarity
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SOFTWARE: PatentIn version 3.1
SEQ ID NO 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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                                                  APPLICANT: Dalmia, Bipin K.
APPLICANT: del Val, Greg
APPLICANT: Desparlais, John R.
APPLICANT: Desparlais, John R.
APPLICANT: Luginbuhl, Peter
APPLICANT: Huginbuhl, Peter
APPLICANT: Muchhal, Umesh
TITLE OF INVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activity
FILE REFERENCE: A-71457-2/RFT/RMS/RMK
CURRENT EPPLICATION NUMBER: US/10/141,531
CURRENT FILING DATE: 2002-05-06
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TITLE OF INVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activity
FILE REFERENCE: A-71457-2/RFT/RMS/RMK
CURRENT APPLICATION NUMBER: US/10/141,531
CURRENT FILING DATE: 2002-05-06
PRIOR APPLICATION NUMBER: US 60/370,609
PRIOR APPLICATION NUMBER: US 60/370,609
PRIOR FILING DATE: 2002-04-05
PRIOR APPLICATION NUMBER: US 60/269,029
PRIOR APPLICATION NUMBER: US 60/269,029
PRIOR APPLICATION NUMBER: US 60/269,029
PRIOR FILING DATE: 2001-05-04
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ORGANISM: Artificial sequence
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NPPLICANT: Dalmia, Bipin K.
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                                    RIOR APPLICATION NUMBER: US 60/370,609
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    Conservative

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Desjarlais, Joh
Helfetz, Peter
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us 60/289,029
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Pred. No.
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PRIOR FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 208
SOFTWARE: PALENTIN VERSION 3.1
SEQ ID NO 112
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SOFTWARE: PatentIn version 3.1
SEQ ID NO 103
LENGTH: 316
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Best Local Similarity
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APPLICANT:
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APPLICANT: Heifetz, Peter
APPLICANT: Luginbuhl, Peter
APPLICANT: Muchhal, Umesh
TITLE OF INVENTION: Nucleic Acids and Proteins with Thioredoxin
FILE REFERENCE: A-71457-2/REF/RMS/RMS
CURRENT APPLICATION NUMBER: US/10/141.531
CURRENT FILING DATE: 2002-05-06
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                                                                                                                                  APPLICANT: Briggs, Steven P.
APPLICANT: Dalmia, Bipin K.
APPLICANT: del Val, Greg
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del Val, Greg
Desjarlais, John R
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Desjarlais, J
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Luginbuhl, Peter
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Pred. No. (
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US-10-141-531-139
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SEQ ID NO 121
LENGTH: 316
TYPE: PRT
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SOFTWARE: PatentIn version 3.1
SEQ ID NO 130
LENGTH: 316
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PRIOR TILING DATE: 2002-04-05
PRIOR APPLICATION NUMBER: US 60/289,029
PRIOR FILING DATE: 2001-05-04
                                                                                                                     APPLICANT: Briggs, Steven P.
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INVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activity
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                                                                                 del Val, Greg
                                                                Desjarlais,
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                                Luginbuhl,
                                                    Heifetz, Peter
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                                    Peter
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Pred. No.
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RESULT 14
US-10-141-531-157
Sequence 157, Application US/10141531
GENERAL INFORMATION:
APPLICANT: Briggs, Steven P.
APPLICANT: Dalmia, Bipin K.
APPLICANT: del Val, Greg
APPLICANT: Desjarlais, John R.
APPLICANT: Desjarlais, John R.
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US-10-141-531-148
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SEQ ID NO 148
LENGTH: 316
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SOFTWARE: Patentin version 3.1
SEQ ID NO 139
LENGTH: 316
TYPE: PRT
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CURRENT FILING DATE: 2002-05-06

PRIOR APPLICATION NUMBER: US 60/370,609

PRIOR FILING DATE: 2002-04-05

PRIOR FILING DATE: 2002-04-05
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NUMBER OF SEQ ID NOS: 208
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Luginbuhl, Peter
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PRIOR APPLICATION NUMBER US 60/289,029
PRIOR FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 208
SOFTWARE: PATENTIN VERSION 3.1
SEQ ID NO 157
LENGTH: 316
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Bacillus subtillis variant
US-10-141-531-157
                                                                                                                                                                                                                                                               PRIOR APPLICATION UNMBER: US 60/289,029
PRIOR FILING DATE: 2001-05-04
RUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin version 3.1
SEQ ID NO 166
LENGTH: 316
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Bacillus subtillis variant
US-10-141-531-166
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US-10-141-531-166
; Sequence 166, Application US/10141531
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Search completed: November 13, 2002, 13:39:39 Job time: 2.42553 secs
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Best Local Similarity 66.7%;
Matches 4; Conservative
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APPLICANT: Muchhal, Omesh
TITLE OF INVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activity
FILE REFERENCE: A-71457-2/RFT/RMS/RMK
CURRENT APPLICATION NUMBER: US/10/141,531
CURRENT FILLING DATE: 2002-05-06
PRIOR APPLICATION NUMBER: US 60/370,609
PRIOR FILING DATE: 2002-04-05
PRIOR FILING DATE: 2002-04-05
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APPLICANT: Dalmia, Bipin K.
APPLICANT: del Val, Greg
APPLICANT: Desjarlais, John R.
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TITLE OF NIVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activity
FILE REFERENCE: A-71457-2/RFT/RWS/RMK
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CURRENT FILING DATE: 2002-05-06
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A; Gene: F9K23.1

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	N.A.; Kaul, S.; White, O.; Alon ay, A.R.; Creasy, T.H.; Dewar, C.; Khan, S.; Khaykin, E.; Kim, Luros, J.S.; Maiti, R.; Marzia Southwick, A.M.; Sun, H.; Tallo	is thaliana #text_change 31-Mar-2001	hels 0; Gaps 0;	1; PID:9238623), NCBIP:64691) NOLOGY	a ventricular-specific avian myosin h 1936571	hange 13-Aug-1999		conserved hypothet hypothetical prote peripherin (clone peripherin (clone peripherin - Afric intermediate filam vimentin - human peripherin intermediate filam peripheria intermediate filam intermediate filam intermediate filam probable WD-domain cell division prot probable membrane

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A; Molecule type: mRNA
A; Residues: 1-298 < QUA>
A; Residues: 1-298 < QUA>
A; Cross-references: GB: K02407; NID: g191356; PIDN: AAA37071.1; PID: g387070
A; Experimental source: baby hamster kidney cells, BHK-21
C; Comment: There is a single gene for desmin in the hamster genome.
C; Superfamily: cytoskeletal keratin
C; Koywords: colled coll; intermediate filament
F; 245-298/Domain: tail <TLE>
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A;Molecule type: mRNA
A;Residues: 1-287 <JUL>
A;Cross-references: GB:M25638; NID:g205683;
C;Superfamily: cytoskeletal keratin
C;Keywords: coiled coil
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C;Date: 27-Jul-1990 #sequence_revision 27-Jul-1990
C;Accession: A21762
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conserved hypothetical protein spr1790 [imported] - C;Species: Streptococcus pneumoniae C;Date: 22-Oct-2001 #sequence_revision 22-Oct-2001 C;Accession: D98095
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C;Species: Mesocricetus auratus (golden hamster)
C;Date: 28-May-1986 #sequence_revision 28-May-19:
C;Accession: A02956
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C;Species: Rattus norvegicus (Norway rat)
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5974, 1984
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A;Cross-references: C;Genetics:
A;Gene: spr1790
C;Superfamily: stage
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J. Bacteriol. 183, 5709-5717, 2001
J. Bacteriol. 183, 5709-5717, 2001
A; Authors: Yang, Y.; Young-Bellido, M.; Zhao, G.; Zook, C.; Baltz, R:H.; A; Authors: Genome of the Bacterium Streptococcus pneumoniae Strain R6.
A; Reference number: A97872; MUID:21429245; PMID:11544234
A; Recession: D98095
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-308 < KUR>
A; Residues: 1-308 < KUR>
A; Residues: 1-308 < KUR>
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Proc. Natl. Acad. Sci. U.S.A. 81, 6909-6913, 1984
A;Title: Characterization and regulation in the expression
A;Reference number: A94014; MUID:85063701; PMID:6594672
A;Accession: A94014
             Eur. J. Biochem. 206, 841-834, 1994
A;Title: Chemical cross-linking indicates a staggered and antiparallel
A;Reference number: S23189; MUID:92299013; PMID:1606966
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C;Date: 18-Dec-1981 #sequence_revision 12-Apr-1996 #text_change 10-Dec-1999
C;Accession: A90969; A94014; JC1459; S02448; A32858; S23189; A02957
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A; Residues: 1-69 <GE2-9
R; Kitamura, S.; Ando, S.; Shibata, M.; Tanabe, K.; Sato, C.;
J. Biol. Chem. 264, 5674-5678, 1989
J. Biol. Chem. 264, 5674-5678, 1989
A; Title: Protein kinase C phosphorylation of desmin at four A; Reference number: A32858; MUID: 89174618; PMID: 2494168
A; Accession: A32858
                                                                                                                                                                                                                                                                                                                                                             A;Title: Phosphorylation of desmin in vitro inhibits formation A;Reference number: S02448; MUID:88196075; PMID:3359992 A;Accession: S02448
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A; Residues: 366-463 <CAP>
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EMBO J. 1, 1649-1656, 1982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N; Alternate names:
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                                                                            R; Geisler, N.; Schuenemann, J.; Web
Eur. J. Biochem. 206, 841-852, 1992
                                                                                                                          A; Molecule type: protein
A; Residues: 10-14; 28-42; 49-59 <KIT>
                                                                                                                                                                                                                                                                                                                                                                                                                                          R;Geisler, N.; Weber,
EMBO J. 7, 15-20, 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: protein
A; Residues: 5-9; 16-27; 63-67 < KUS>
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A; Reference number:
A; Accession: S23189
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6; Conserv
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                                                                                                       Weber,
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F;100-407/Domain: rod <ROD>
F;100-132/Region: coll 1A
F;133-142/Region: linker 1
F;143-243/Region: coll 1B
F;244-259/Region: linker 12
F;260-278/Region: linker 2
F;279-286/Region: linker 2
F;279-286/Region: linker 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-469 <LIZ>
A; CB:M53391; GB:M26935; GB:M58168; GB:M59379; GB:M65071; GB:X53154;
A; Cross-references: GB:M63391; GB:M26935; GB:M58168; GB:M59379; GB:M65071; GB:X53154;
A; Note: the introns of this gene contain 1.2K of repetitive sequences belonging to the C; Comment: Desmin intermediate filaments are found in the cytoplasm of cultured myoger cting myofibrils to each other and to the plasma membrane from the periphery of the Z; C; Comment: The molecule contains three structurally distinct domains. The surface-expr.
The tailpiece comprises the carboxyl-terminal residues.
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                                                                                                                                                                                                                                                                                                                                                                                                       A;Gene: GDB:DES
A;Cross-references: GDB:119841; OMIN:125660
A;Map position: 2935-2935
A;Introns: 192/2; 212/3; 244/3; 298/3; 340/3; 4
C;Superfamily: cytoskeletal keratin
C;Keywords: acetylated amino end; coiled coil;
C;Keywords: acetylated amino end; coiled coil;
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A;Molecule: type: protein
A;Rosidues: 110-118;255-266;274-282;393-401 <GE3>
A;Rosidues: 110-118;255-266;274-282;393-401 <GE3>
C;Comment: This protein was isolated from chicken gizzard.
C;Comment: There appears to be a single desmin gene in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R;L1, 2.; Lilienbaum, A.; Butler-Browne, G.; Paulin, D. Gene 78, 243-254, 1989
A;Title: Human desmin-coding gene: complete nucleotide sequence, A;Reference number: JE0063; MUID:89378751; PMID:2673923
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F;4008-463/Domain: tail <END>
F;4008-463/Domain: tail <END>
F;4008-463/Domain: tail <END>
F;1/Modified site: blocked amino end (Ser) (probably acetylated) #status experimental
F;6,32/Binding site: phosphate (Ser) (covalent) (by cdc2 kinase) #status experimental
F;12,29,38,56/Binding site: phosphate (Ser) (covalent) (by protein kinase C) #status ex
F;29,35,50/Binding site: phosphate (Ser) (covalent) (by cAMP-dependent kinase) #status
F;64/Binding site: phosphate (Thr) (covalent) (by cdc2 kinase) #status experimental
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C;Species: Homo sapiens (man)
C;Date: 31-Mar-1990 #sequence_revision 31-Mar-1990 #text_change 10-Dec-1999
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2/Modified site: acetylated amino end (Ser) (in mature form) *status predicted 7,32/Binding site: phosphate (Ser) (covalent) (by cdc2 kinase) *status predicted 13,48/Binding site: phosphate (Ser) (covalent) (by protein kinase C) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (by cAMP-dependent kinase) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (by cAMP-dependent kinase) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (by cAMP-dependent kinase) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (by cAMP-dependent kinase) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (by cAMP-dependent kinase) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (by camp-dependent kinase) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (by camp-dependent kinase) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (by camp-dependent kinase) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (by camp-dependent kinase) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (by camp-dependent kinase) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (by camp-dependent kinase) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (by camp-dependent kinase) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (by camp-dependent kinase) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (by camp-dependent kinase) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (by camp-dependent kinase) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (by camp-dependent kinase) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (by camp-dependent kinase) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (by camp-dependent kinase) *status predicted 45,60/Binding site: phosphate (Ser) (covalent) (covalent) (covalent) (covalent) (covalent) (covalent) (covalent) (covalent) (covalent) (covalen
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416-469/Domain: tail <END>
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Pred. No. 41;
0; Mismatches
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RESULT 10
A54104
A54104
Gesmin - mouse
C:Species: Mus musculus (house mouse)
C;Date: 02-Aug-1994 #sequence_revision 02-Aug-1994 #text_change 19-Apr-1996
C;Accession: A54104; S31404
R;Li, H; Choudhary, S.K.; Milner, D.J.; Munir, M.I.; Kuisk, I.R.; Capetanal
J. Cell Biol. 124, 827-641, 1994
A;Title: Inhibition of desmin expression blocks myoblast fusion and interfer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cell 43, 327-338, 1985
A; Title: Characterization of the hamster desmin A: Deference number: A24783; MUID:86079506; PMID:
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                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: DNA
A; Residues: 1-469 < QUA>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Species: Mesocricetus auratus (golden hamster)
C;Date: 22-Jul-1987 #sequence_revision 22-Jul-1987 #text_change 13-Aug-1999
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C;Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change
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Keywords: coiled coil
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6; Conserv
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A; Residues: 1-40 <LIH>
A; Cross-references: EMBL: 218892
C; Superfamily: cytoskeletal keratin
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A; Accession: S31404
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A;Description: Regulation of the Mouse Desmin Gene: Transactivation by MyoD, Myogenin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Experimental source: brain R;Julien, J.P.; Meyer, D.; Flavell, D.; Hurst, J.; Grosveld, Brain Res. Mol. Brain Res. 1, 243-250, 1986
Brain Res. Mol. Brain Res. 1, 243-250, 1986
A;Title: Cloning and developmental expression of the murine: A;Reference number: A43772
A;Accession: A43772
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J. Cell Biol. 100, 843-850, 1985
A;Title: Genetics, evolution, and expression of the 68,000-mol-wt neurofilament A;Reference number: A26562; MUID:85131334; PMID:3919033
A;Accession: A26562
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A; Residues: 1-543 <LEW>
A; Cross-references: GB: M13016;
A; Note: the authors translated
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                                                                                                                                                                                                                                                                                                                                                                                                                    A;Molecule type: mRNA A;Residues: 1-5, Y;,7-8, 'Y',10-64,'M',66-72,'L',74-98,'D',100-194,'R',196-202,204-239,'A;Residues: 1-5, Y;,7-8, 'Y',10-64,'M',66-72,'L',74-98,'D',100-194,'R',196-202,204-239,'A;Cross-references: GB:M20480; NID:g200037; PIDN:AAA39814.1; PID:g200038 A;Cross-references: GB:M20480; NID:g200037; PIDN:AAA39814.1; PID:g200038 A;Note: the authors translated the codon CGC for residue 195 as Ala R;Sihag, R,K.; Nixon, R.A.
J. Biol. Chem. 265, 19786-19791, 1990
A; Title: Structure of the 60-kDa neurofilament gene and A; Reference number: I55316; MUID:91060592; PMID:2246261
                                                                                                                      A; Molecule type: protein A; Residues: 52-57 <SIH> R; Nakahira, K.; Ikenaka,
                                                                                                                                                                                                                                                 J. Bloi. Chem. 266, 18861-18867, 1991
A;Title: Identification of Ser-55 as a major
A;Reference number: A41012; MUID:92011653; PM
A;Accession: A41012
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A; Residues: 242-543 <LE2>
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Cross-references: GB:L22550
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                                                                                                                               Ikenaka, K.; Wada,
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A,Molecule type: DNA
A,Residues: 1-5,"/,7-8,'Y',10-28 <RES>
A,Residues: 1-5,"/,7-8,'S', NID:9200027; PIDN:AAA39812.1; PID:9554245
C;Comment: This is the most abundant of the three neurofilament proteins and, C;Comment: 349/3; 391/2; 498/1
C;Superfamily: cytoskeletal keratin
C;Superfamily: cytoskeletal keratin
C;Superfamily: cytoskeletal keratin
C;Superfamily: cytoskeletal keratin
C;Superfamily: head <"""
F;2-72/Domain: head <"""
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             neurofilament triplet L protein - N;Alternate names: neurofilament l N;Contains: Glu-50 brain peptide C;Species: Homo sapiens (man) C;Date: 29-Jan-1993 **senveror**
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: DNA
A; Residues: 1-544 < JUL>
A; Cross-references: EMBL:XO5608; NID:91495072; PIDN:CAA29097.1;
A; Cross-references: EMBL:XO5608; NID:91495072; PIDN:CAA29097.1;
A; Note: the authors translated the codon ATG for residue 366 as:
R; Pospelov, V.A.; Pospelova, T.V.; Julien, J.P.
Cell Growth Differ. 5, 187-196, 1994
Cell Growth Differ. 5, 187-196, 1994
A; Title: AP-1 and Krox-24 transcription factors activate the neu
A; Reference number: 152832; MUID:94235564; PMID:8180132
A; Accession: 152832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Species: Homo sapiens (man)
C;Date: 29-Tan-1993 #sequence_revision 29-Jan-1993 #text_change 21-Jul-2000
C;Date: 29-Tan-1993 #sequence_revision 29-Jan-1993 #text_change 21-Jul-2000
C;Accession: S07144; I52832; A60703
R;Julien, J:P; Grosveld, F: Yazdanbaksh, K.; Flavell, D.; Meijer, D.; Mushynski, Biochim: Biophys. Acta 909, 10-20, 1987
A;Title: The structure of a human neurofilament gene (NF-L): a unique exon-intron A;Reference number: S07144; MUID:87214213; PMID:3034332
A;Accession: S07144
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A;Cross-references: GDB:120227; OMIM:162280
A;Map position: 8p21-8p21
A;Introns: 349/3; 391/2; 498/1
C;Superfamily: cytoskelettal keratin
C;Keywords: brain; coiled coil; intermediate
F;469-544/Product: Glu-50 peptide #status pre
                                                                                                                                                                                                                             A; Molecule type: protein
A; Residues: 469-472, 'D', 474 <NOM>
A; Experimental source: Glu-50 brain peptide
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                                                                                                                                                                                                                                                                                                                                  R; Nomata, Y.; Watanabe, T.; Wada, H.
J. Blochem. 93, 825-831, 1983
A;Title: Highly acidic proteins from human brain: purification
A;Reference number: A60703; MUID:83265667; PMID:6135695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: DNA
A; Residues: 1-10 < POS>
                                                                                                                                                          A; Gene: GDB: NEFL; NFL
                                                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: GB:S70309; NID:g547176; PIDN:AAD14057.1; PID:g4261757 R;Nomata, Y.; Watanabe, T.; Wada, H.
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                                                                                                                                                                                                             A; Note: this acidic protein is named
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235-256/Region: linker 12
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AE50>

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A; Koteus, preliminary
A; Status; preliminary
A; Molecule type: protein
A; Molecule type: protein
A; Residues: 9-14;23-29;30-53 <GON>
A; Residues: 9-14;23-29;30-53 <GON>
C; Comment: Manmalian neurofilaments usually contain three polypeptides, L, M, and H ('C; Comment: Manmalian neurofilament proteins: a conserved alpha-helical region, whose ke all other intermediate filament proteins: a conserved alpha-helical region, whose C; Comment: The amino-terminal headpiece is basic with a high content of hydroxyamino C; Comment: The amino-terminal headpiece is basic with a high content of hydroxyamino al beta turns; domain b is acidic and rich in glutamic acid and lysine residues.

al beta turns; domain b is acidic and rich in glutamic acid and lysine residues.
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C:Decies: Xenopus laevis (African clawed frog)
C:Decies: Xenopus laevis (African clawed frog)
C:C:Decies: Xenopus laevis (African 18-Nov-1994 #text_change 12-Apr-1995
C:Accession: B44841
R;Charnas, L.R.; Szaro, B.G.; Gainer, H.
J. Neurosci. 12, 3010-3024, 1992
A;Title: Identification and developmental expression of a novel low moleculary Rights (African Harman MUID:92356194; PMID:1494944
A;Accession: B44841
A;Status: preliminary
A;Status: preliminary
                                                                                                                                                                                                                             A;Molecule type: protein
A;Residues: 1-82;278-548 <GE2>
A;Residues: 232 is either lysine or arginine
A;Rote: residue 332 is either lysine or arginine
R;Gonda, Y; Nishizawa, K; Ando, S; Kitamura, S; Minoura, Y; Nishi, Y; Inagaki, M.
Blochem. Blophys. Res. Commun. 167, 1316-1325, 1990
A;Title: Involvement of protein kinase C in the regulation of assembly-disassembly of no A;Reference number: A34569; MUID:90211318; PMID:2108674
A;Recession: A34569
                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Molecule type: protein
A;Residues: 1-547 <GE1>
R;Geisler, N.; Kaufmann, E.; Fischer, S.; Plessmann, U.; Weber, K.
EMBO J. 2, 1295-1302, 1983
A;Title: Neurofilament architecture combines structural principles
A;Reference number: A90973
A;Accession: A90973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Species: Sus scrofa domestica (domestic pig)
C;Date: 15-Nov-1984 #sequence_revision 28-May-1986
C;Accession: A91337; A90973; A34569; A02963
R;Geisler, N.; Plessmann, U.; Weber, K.
FEBS Lett 182, 475-478, 1985
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A; Residues: 1-544 <CHA>
A; Experimental source: brain
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C;Species: Xenopus laevis (African clawed frog)
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C;Comment: The boundaries of the domains between residues C;Comment: This protein was isolated from spinal cord. C;Superfamily: cytoskeletal keratin C;Superfamily: cytoskeletal keratin C;Keywords: coiled coil; intermediate filament F;1-70/Domain: head (HED> F;92-123/Domain: coil la, alpha-helical rod <RIB> F;137-232/Domain: coil lb, alpha-helical rod <RIB> F;255-399/Domain: coil 2, alpha-helical rod <RD2> F;402-442/Region: tail subdomain b F;443-548/Region: tail subdomain b
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A;Title: Domain- and site-specific phosphorylation of bovine NF-L by Rho-associated A;Reference number: JW0094; MUID:98238650; PMID:9571164
A;Accession: JW0094
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C;Species: Bos primigenius taurus (cattle)
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(C STRAIN-WISTAT: TISSUE-AORTH;

W WEDLINE-9414566; PubMed-8286440;

W WEDLINE-9414566; PubMed-8286410;

W AVENTINE-9414566; PubMed-8286410;

W AVENTINE-9414562; PubMed-8286410;

W AVENTINE STRUCTURE and expression.";

B Lochim. Blophys. Acta 1217:107-109(1944).

C I- FUNCTION: DESMIN ARE CLASS-III INTERMEDIATE FILAMENTS FOUND IN COUNCILS. IN ADULT STRIATED MUSCLE THEY FORM A FIBROUS NETWORK CONNECTING MYOFIBRILS TO EACH OTHER AND TO THE PLASMA

C MEMBRANE FROM THE PERIPHERY OF THE Z-LINE STRUCTURES.

C I- SUBCELLULAR LOCATION: Cytoplasmic.

C I- SUBCELLULAR LOCATION: Cytoplasmic.
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MEDLINE-89378751; PubMed-2673923;

Li Z., Lilenbaum A., Butler-Browne G., Paulin D.;

"Human desmin-coding gene: complete nucleotide sequence,
characterization and regulation of expression during myogenesis
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                                                                                                                                                                                                                                             "Human desmin gene: cDNA sequence, regional localization and exclusion of the locus in a familial desmin-related myopathy."; Hum. Genet. 98:422-429(1996).
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Vicart P., Dupret J.M., Hazan J., Li Z.,
Weissenbach J., Fardeau M., Paulin D.;
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MEDLINE-98409654; PubMed-9736733;
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Pred. No. 14;
); Mismatches
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C7275DC3E528DFF5 CRC64;
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                                                                                                                                            Gorokhova S.,
, Sivakumar K.,
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RI Hum. Mol. Genet. 8:2191-2198(199).

C HUNCTION: DESMIN ARE CLASS-III INTERMEDIATE FILAMENTS FOUND IN CONSTRUCTION. DESMIN ARE CLASS-III INTERMEDIATE FILAMENTS FOUND IN MISCLE CELLS. IN ADULT STRIATED MUSCLE THEY FORM A FIBROUS OF MISCRE CONNECTING MYOFIBRILS TO EACH OTHER AND TO THE PLASMA MEMBRANE FROM THE PERIPHERY OF THE Z-LINE STRUCTURES.

C -1- SUBGUNIT: HOMOPOLYMER.

C -1- SUBGULTULAR LOCATION: Cytoplasmic.

C -1- SUBGLELULAR LOCATION: Cytoplasmic.

C -1- SUBGLELULAR LOCATION: Cytoplasmic.

C -1- DISEASE: DEFECTS IN DES ARE THE CAUSE OF DESMIN-RELATED MYOPATHY,

C A FAMILIAL CARDIAC AND SKELETAL MYOPATHY (CSM). CMS IS

C CHARACTERIZED BY SKELETAL MUSCLE WEAKNESS ASSOCIATED WITH CARDIAC

CONDUCTION BLOCKS, ARRYTHMIAS AND RESTRICTIVE DEPOSITS IN

C CARDIAC AND SKELETAL MUSCLE WEAKNESS ASSOCIATED MYOPATHY CAN

C CARDIAC AND SKELETAL MUSCLE CELLS. A DESMIN-RELATED MYOPATHY CAN

C HAVE A DISTAL ONSET, IT IS THEN KNOWN AS HEREDITARY DISTAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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"A dysfunctional desmin mutation in a patient with severe general
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sjoeberg G., Sa
Horowitz S.H.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rosen D.R., Wijsman E.M.,
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EMBL; M63391; AAA99221.1; -.
EMBL; U59167; AAC50680.1; -.
PIR; JE0063; DMUD.
HSC-2DPAGE; P17661; HUMAN.
Genew; HGNC:2770; DES.

Pfam; PF00038; filament; PROSITE; PS00226; IF; 1. InterPro; IPR001664; IF. MIM; 125660; MIM; 601419;

Intermediate INIT_MET filament; Coiled coil; Muscle protein; Disease mutation.

DOMAIN DOMAIN DOMAIN DOMAIN VARIANT VARIANT VARIANT VARIANT DOMAIN DOMAIN DOMAIN DOMAIN ARIANT 108 412 108 141 151 252 268 287 295 344 336 392 359 107 411 469 140 150 251 287 392 359 344 336 COIL 2A. LINKER 1. COIL 1B. LINKER 12. TAIL. COIL 1A. A -> P (IN CSM; HETEROZYGOUS WITH ILE-391 GIVES A SEVERE CMS CHILDHOOD-ONSET). FIIGHVAR_007901.

N -> I (IN CSM; HETEROZYGOUS WITH PRO-358 GIVES A SEVERE CMS CHILDHOOD-ONSET). FETIG-VAR_007902. /FTId=VAR_009188. A -> P (IN CSM; M: /FTId=VAR_007900. COIL 2B. MISSING (IN CSM; L -> P (IN HDM). /FTId=VAR_009189 MILD SEVERE FORM). ADULT - ONSET).

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RESULT 7
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SEQUENCE
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21-JUL-1986 (Rel
15-JUL-1999 (Rel
         EMBL;
                                        This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Enthe European Bioinformatics Institute. There are no restrues by non-profit institutions as long as its content modified and this statement is not removed. Usage by and entitles requires a license agreement (See http://www.isb-sor send an email to license@fisb-sib.ch).
                                                                                                                           Proc. Natl. Acad. Sci. U.S.A. 78:4120-4123(1981).

-I FUNCTION: DESNIN ARE CLASS-III INTERMEDIATE FILAMENTS FOUND IN MUSCLE CELLS. IN ADULT STRIAMEN MUSCLE THEY FORM A FIBROUS NETWORK CONNECTING MYOFIBRILS TO EACH OTHER AND TO THE PLASMA MEMBRANE FROM THE PERIPHERY OF THE Z-LINE STRUCTURES.

-I- SUBCELLULAR LOCATION: Cytoplasmic.
-I- SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY.
                                                                                                                                                                                              intermediate-sized filaments and vimentin.";
                                                                                                                                                                                                                         SEQUENCE OF 333-470.
MEDLINE-82037793; PubMed-6945574;
Geisler N., Weber K.;
"Comparison of the proteins of tw
                                                                                                                                                                                                                                                                                      TISSUE-Longissimus muscle
Beuzen N.D., Hall A.D., G
"A polymorphic CT-repeat
mest quality.";
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Mammalla; Eutherla;
NCBI_TaxID-9823;
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Chikuni K., Tanabe
                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                  Tuggle C.K., Sanchez-Serrano I., Smith B., Marklund I
Muscle ESTs II: cloning, sequencing and mapping the
intermediate filament protein desmin (DES).",
Submitted (MAR-1999) to the EMBL/GenBank/DDBJ databas
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BAA25136.1; -. BAA25134.1; -. AAD46492.1; -.
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G -> P (IN REF. 1 AND 2).
FANYI -> SPIYM (IN REF. 1 #
MISSING (IN REF. 1, 2 AND 3)
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Best Local
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P19527; Q63367;
01-FEB-1991 (Rel. 17, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Neurofilament triplet L protein (68 kDa neurofilament
(Neurofilament light polypeptide) (NF-L).
NEFL OR NFL OR NF68.
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SEQUENCE
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"Glycosylation of mammalian of O-linked N-acetylglucosamine L and M.";
                                                                        MEDLINE-95264348; PubMed-7745611; Realme V., Reeben M., Neuman T., Palgi J., Palm K., Paalme V., "Characterization of the rat light neurofilament (N and identification of NGF and CAMP responsive regio J. Neurosci. Res. 40:177-188(1995).
                                                                                                                                                                                                         Chin S.S., Liem R.K.H.;
"Expression of rat neurofilament pro transfected non-neuronal cells.";
Eur. J. Cell Biol. 50:475-490(1989).
                          CARBOHYDRATE-LINKAGE SITES,
MEDLINE-93346421; PubMed-8344946;
Dong D.L.-Y., Xu Z.-S., Chevrier
Hart G.W.;
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MEDLINE-85252830; Pu
                                                                                                                                                                                                                                                                                     Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                         SEQUENCE OF 1-10
                                                                                                                                                            Julien J.-P.,
"Cloning of a
                                                                                                                                                                                                                                             MEDLINE-90184052;
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Ramachandran K., Grosveld
cDNA encoding the smallest
                   of mammalian neurofilaments.
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NFL_MOUSE
P08551;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam; PF00038; filament; 1.
PROSITE; PS00226; IF; 1.
Intermediate filament; Coiled coil; Neurone;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; M25638; AAA41694.1; -. EMBL; X53981; CAA37931.1; -. PIR; A21762; A21762.
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FUNCTION: NEUROFILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, M, AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER.

DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH
THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERNEDIATE FILMMENT
PROTEINS ARE DUE TO THE TAILFIECE EXTENSIONS. THIS REGION MAY FORM
A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH
OTHER NEURONAL COMPONENTS OR IONS.

PTM: O-GLYCOSYLATED; CONTAINS THREE N-ACETYLGLUCOSAMINE SIDE
CHAINS.
                                                                                                                                                                    1 KKVHEE
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O-LINKED (GLCNAC).
/FTId-CAR_000129.
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TAIL, SUBDOMAIN B (ACIDIC).
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A -> E (IN REF. 2):
EKEK -> KKDE (IN RE
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GADEAA -> KARMSS (IN REF. 2).
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                                                    PRT;
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"Structure of the 68-kDa neurofilament gene expression.";
J. Biol. Chem. 265:19786-19791(1990).
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Mammalia; Eutheria;
NCBI_TaxID-10090;
                                                                                                                                                                                                                                                                                                                     non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for correct or send an email to licensease.
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Julien J.-P., Meyer D., Flavell D., Hu
"Cloning and developmental expression
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Neurofilament triplet L protein (68 kDa neurofilament protein)
(Neurofilament light polypeptide) (NF-L).
Intermediate
INIT_MET
DOMAIN
                        'IK; MGI:97313; NL..

INTERPTO; IPR001664; IF.

Pfam; PF00038; filament; 1.

PP0031EB; PS00226; IF; 1.

PR011EB; PS00226; IF; 1.
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                                                                                                                                                                                                          EMBL; X02165; CAB51616.1;
EMBL; M20480; AAA39814.1;
EMBL; M13016; AAA39810.1;
EMBL; M55423; AAA39812.1;
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BIOL. Chem. 265:19786-19791(1990).

FUNCTION: NEUROPILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, M, AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALLEBER.

DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FORM A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR THE THREE NEUROPILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM
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MGI:97313; Nfl.
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             VARIANT CMT2E PRO-332.

WARDLINE-20307176; PubMed-10841809;
MORTSIYANOVA I.V., Perpelov A.V., Polyakov A.V., Si-
MORTSIYANOVA I.V., Perpelov A.V., Polyakov A.V., Si-
Dadali E.L., Oparin R.B., Petrin A.N., Evgrafov O.V

"A new variant of Charcot-Marie-Tooth disease type
"Fa new variant of Charcot-Marie-Tooth disease type
"result of a mutation in the neurofilament-light gen
Am. J. Hum. Genet. 67:37-46(2000).

-1- FUNCTION: NEUROFILAMENTS USUALLY CONTAIN THREE
AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF
                                                                                                                     MEDIINE-94235564; PubMed-8180132;
Pospelov V.A., Pospelova T.V., Julien J.-P.;
"AP-1 and Krox-24 transcription factors activate the neurofilament light gene promoter in P19 embryonal carcinoma cells.";
Cell Growth Differ. 5:187-196(1994).
                                                                                                                                                                                                                                                                                                                                NEL_HUMAN STANDARD; PRT; 543 AA.

P07196; Q16154;
01-APR-1988 (Rel. 07, Created)
01-APR-1988 (Rel. 07, Last sequence update)
16-CCT-2001 (Rel. 40, Last annotation update)
Neurofilament triplet L protein (68 kDa neurofilament
(Neurofilament light polypeptide) (NF-L).

NEFL OR NFL OR NF68.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SITE
                                                                                                                                                                                                  "The structure of a human neurofilament intron organization in the intermediate Biochim. Biophys. Acta 909:10-20(1987).
                                                                                                                                                                                                                                 Julien J.-P.,
Mushynski W.;
                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
MEDLINE-87214213; PubMed-3034332;
Jullen J.-P., Grosveld F., Yazdanbaksh
                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                               SEQUENCE OF 1-10 FROM N.A.
                                                                                                                                                                                                                                                                                     NCBI_TaxID-9606;
                                                                                                                                                                                                                                                                                                                         Homo sapiens
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381
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Primates;
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TAIL.
COIL 1A.
LINKER 1.
COIL 1B.
LINKER 12.
COIL 2A.
COIL 2B.
TAIL, SUBDOMAIN A.
TAIL, SUBDOMAIN B (ACIDIC).
O-LINKED (GLUNAC) (BY SIMILARITY).
O-LINKED (GLUNAC) (BY SIMILARITY).
O-LINKED (GLUNAC) (BY SIMILARITY).
EPITOPE (RECOGNIZED BY IF-SPECIFIC MONOCLONAL ANTIBODY).
Y -> I (IN REF. 1).
Y -> K (IN REF. 1).
Y -> K (IN REF. 1).
O-LINKED (GLUNAC) (BY SIMILARITY).
O-LINKER 1).
O-A (IN REF. 1).
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Pred. No. 17;
0; Mismatches
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IN REF. 1)
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filament
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17;
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e type 2 is;
tht gene.";
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NEURONAL CALIBER.
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RESULT 11

NEL_XENLA
ID REL_X
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DT 01-JI
DT 16-O(
DE Neur(
DE L)
OS Xeno
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Best Local
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                               NFL_XENLA
P35616;
01-JUN-1994
01-JUN-1994
16-OCT-2001
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EMBL; S70309;
PIR; S07144; S
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CARBOHYD
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                                                                                                                                                                                                                      SEQUENCE
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PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This
                      Neurofilament
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  Xenopus laevis (African clawed frog).
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MIM; 162280; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    between
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Intermediate
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                                                                                                                                             1 KKVHEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISEASE: DEFECTS IN NEFL ARE A CAUSE OF CHARCOT-MARIE-TOOTH DESEASE TYPE 2E (CWT2E).
MISCELLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER KONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIMILARITY: BELONGS TO THE INTERMEDIATE FILAME DATABASE: NAME-Inherited peripheral neuropathi WWW-"http://molgen-www.uia.ac.be/CMTMutations/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT PROTEINS ARE DUE TO THE TAILLPIECE EXTENSIONS. THIS REGION MAY FOR CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A CHARGED SCAFFOLDING STRUCTURE SU OTHER NEURONAL COMPONENTS OR IONS
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                                                                                                                                  KKVHEE
                                                                                                                                                                          6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                           mutation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                PS00226; IF; 1
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                               4 (Rel. 29, 14 (Rel. 29, 11 (Rel. 40, 1
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                                                                                                                                                                           Conservative
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S07144.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      filament;
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A
                                                                            STANDARD;
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                     Last sequence update)
Last annotation update)
L protein (Neurofilamen
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TAIL.
COIL 1A.
LINKER 1.
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LINKER 1.
COIL 2A.
LINER 2.
COIL 2A.
TAIL, SUBDOMAIN A.
TAIL, SUBDOMAIN A.
O-LINKED (GLCNAC) (BY SIMILARITY).
CPLINED (GLCNAC) (BY SIMILARITY).
EPITOPE (RECOGNIZED BY IF-SPECIFIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         THE INTERMEDIATE FILAMENT
                                                                                                                                                                           0;
                                                                                                                                                                                                                              MONOCLONAL ANTIBODY).
Q -> P (IN CMT2E).
/FTId-VAR_009703.
                                                                                                                                                                                     Score 32;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    coil; Neurone;
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                      (Neurofilament
                                                                                                                                                                           Mismatches
                                                                             544
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                                                                                                                                                                                                                                                                                                                                                                                                                                           disease
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17;
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                      light polypeptide) (NF-
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L outstation -
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01-OCT-1996 (Re
16-OCT-2001 (Re
Neurofilament t
                                                                                                                                                                                                     NFL_PIG
P02547;
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DOMAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE-92356194; PubMed-1494944;
Charnas L.R., Szaro B.G., Galner H.;
"Identification and developmental ex-
weight neuronal intermediate filamen
  Mammalia;
                                              Sus scrofa (Pig).
                                                                      NEFL.
                                                                             21-JUL-1986 (Rel. 01, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Neurofilament triplet L protein (68 kDa neurofilament
(Neurofilament light polypeptide) (NF-L).
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DOMAIN
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Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
Xenopodinae; Xenopus.
NCBI_TaxID-8355;
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                                                                                                                                                                                                                                                                                                                                           218 KKVHEE 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Neurosci. 12:3010-3024(1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FUNCTION: NEUROPILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, MAND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER. AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF THE THREE MISCELLANGURS: NF-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM
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iate filament; Coiled
1 87
; Metazoa;
Eutheria;
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120
133
229
247
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  Chordata; Craniata; Vertebrata; Cetartiodactyla; Suina; Suidae;
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TAIL, SUBDOMAIN 1
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POLY-GLU.
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  Euteleostomi;
Sus.
                                                                                                              protein)
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in Xenopus
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RESULT 13

NFL_BL

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Best Local
                            NFL_BOVIN

NFL_BOVIN

NFL_BOVIN

P02548; P79127;

21-JUL-1986 (Rel. 01, Created)

01-NOV-1997 (Rel. 35, Last sequence update)

16-OCT-2001 (Rel. 40, Last annotation update)

Neurofilament triplet L protein (68 kDa neurofilament

Neurofilament light polypeptide) (NF-L) (Micro glutament)
NEFL.
Bos taurus
Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              UNSURE
SEQUENCE
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DOMAIN
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EMBO J. 2:1295-1302(1983).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CARBOHYD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Geisler N., Plessmann U., Weber K
"The complete amino acid sequence
neurofilament protein (NF-L).";
FEBS Lett. 182:475-478(1985).
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                                                                                                                                                                                                                                                                                                                            222 KKVHEE
                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity hes 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                  1 KKVHEE
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MISCELLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM
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548
      Metazoa;
                          (Bovine).
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      Chordata;
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O-LINKED (GLCNAC) (BY SIMILARITY).
CPLINKED (GLCNAC) (BY SIMILARITY).
EPITOPE (RECOGNIZED BY IF-SPECIFIC MONOCLONAL ANTIBODY).
OR K.
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COIL 1A.
LINKER 1.
COIL 1B.
LINKER 12.
COIL 2A.
LINKER 2.
COIL 2B.
TAIL, SUBDOMAIN F
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      Craniata;
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Pred. No.
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      Vertebrata;
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                                                                                    lament protein)
glutamic acid-rich
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    Euteleostomi;
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RESULT 14
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ID NFL_COTJA
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CONFLICT
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEBS Lett.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 468-554.
MEDLINE-85154567; PubMed-3884373;
ISOBO T., Okuyama T.;
"Brain micro glutamic acid-rich protein is the "Brain micro glutamic acid-rich as determined
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN-Holstein; TISSUE-Brain;
Hill W.D., Zhang L., Balin B.J.,
Submitted (FEB-1997) to the EMBL
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Bovidae; Bovinae;
NCBI_TaxID-9913;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WOTHER NEURONAL COMPONENTS OR IONS.
MISCELLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY.
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                                                                                                   KKVHEE
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                                                                                                                                                                                  Similarity
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                    STANDARD;
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ROD (BY SIMILARITY).
TAIL (BY SIMILARITY)
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COIL 2A.
LINKER 2.
COIL 2B.
COIL 2B.
TAIL, SUBDOMAIN A.
TAIL, SUBDOMAIN B (ACIDIC).
MISSING (IN REF. 2).
A >> AEA (IN REF. 2).
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EMBL/GenBank/DDBJ
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COIL 1B.
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Pred. No.
                    PRT;
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D772B81CA2C31C1A
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RESULT 15 E2B1_METJA

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Best Local
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01-JUN-1994
16-OCT-2001
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J. Cell Biol. 121:387-395(1993).

1. Cell Biol. 121:387-395(1993).

1. FUNCTION: NURROFILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, N-1-FUNCTION: DEUROFILAMENT OF THE MAINTENANCE OF NEURONAL CALIBER.

1. DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH
THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERREDINTE FILAMENT PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FOR A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the European Bioinformatics Institute. There are no rest
use by non-profit institutions as long as its content
modified and this statement is not removed. Usage by an
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Eukaryota; Metazoa; Chordata; Cranlata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
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                                                                                                                                      DOMAIN
SEQUENCE
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                                                                                                                                                                                                                                                                                                                 DOMAIN
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EMBL; D13222; BAA02503.1;
InterPro; IPR001664; IF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ohara O., Gahara Y., Miyak
"Neurofilament deficiency
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-93224534; PubMed-8468353;
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224 KKVHEE
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DISEASE: NF-L DEFICIENCY CAUSES THE DISORDER QUIVER.
MISCELLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE
MEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL
INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC
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6; Conserv
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PS00226; IF; 1.
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, Last annotation u
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in quail
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COIL 1B.
LINKER 12.
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LINKER 2.
COIL 2B.
TAIL, SUBDOMAIN A.
TAIL, SUBDOMAIN A.
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COIL 1A.
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                                                                                       Pred.
                                                                                                     Score 32;
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(Neurofilament light polypeptide) (NF-
                                                                                                                                          9B957ABD8EBA7712
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Search completed: November 13, 2002, 13:16:53
Job time: 5.97872 secs
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Matches 5; Conserv
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Bult C.J., White O., Olsen G.J., Zhou L., Fleischmann R.D.,

Button G.G., Blake J.A., FitzGerald L.M., Clayton R.A., Gocayne J.D.,

Sutton G.G., Blake J.A., FitzGerald L.M., Clayton R.A., Gocayne J.D.,

Kerlavage A.R., Dougherty B.A., Tomb J.-F., Adams M.D., Reich C.I.,

Overbeek R., Kirkness E.F., Weinstock K.G., Merrick J.M., Glodek A.,

Scott J.L., Geoghagen N.S.M., Weidman J.F., Fuhrmann J.L., Nguyen D.,

Utterback T.R., Kelley J.M., Peterson J.D., Sadow P.W., Hanna M.C.,

Cotton M.D., Roberts K.M., Hurst M.A., Kalne B.P., Borodovsky M.,

Klenk H.-P., Fraser C.M., Smith H.O., Woese C.R., Venter J.C.,

"Complete genome sequence of the methanogenic archaeon, Methanococcus

"annaschil.";
                                                                          1 KKVHEE 6
||:|||
112 KKIHEE 117
                                                                                                                                                                                                                                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Science 273:1058-1073(1996).

-I: FUNCTION: CATALYZES THE EXCHANGE OF INITIATION FACTOR 2-BOUND GDP FOR GTP (BY SIMILARITY).

-I: SUBUNIT: COMPLEX OF TWO DIFFERENT SUBUNITS (POTENTIAL).

-I: SUBULLARITY: BELONGS TO THE EIF-2B ALPHA/BETA/DELTA SUBUNITS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E2B1_METJA STANDARD; PRT; 329 AA. Q57896; Q57896; Q67896; Q77896; Q77897 (Rel. 35, Created) Q77897 (Rel. 35, Last sequence update) Q77997 (Rel. 40, Last annotation update) Q77991 (Rel. 40, Last annotation update) Q7799 exchange factor).
                                                                                                                                                                                                                                              Complete proteome.
                                                                                                                                                                                                                                                                    TIGRFAMS; TIGR00512; aIF-2BI_fam; 1.
TIGRFAMS; TIGR00524; eIF-2B_rel; 1.
Hypothetical protein; Initiation factor; Protein biosynthesis;
                                                                                                                                                                                                                                                                                                                             InterPro; IPR005251; AIF-2BI_fam.
InterPro; IPR000649; IF-2B.
Pfam; PF01008; IF-2B; 1.
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Archaea; Euryarchaeota; Methanococci; Methanococcales;
Methanocaldococcaceae; Methanocaldococcus.
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                                                                                                                                                                                                                                329 AA;
                                                                                                                                                                                                                                  36802 MW;
                                                                                                                                                                       96.98;
                                                                                                                                                                       Score 31; DB 1; Length 329; 
Pred. No. 16;
                                                                                                                                                                                                                                3936298C574730C9 CRC64;
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Perfect score:
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3: sp_fungl:*
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5: sp_inverteb:
6: sp_manmal:*
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32
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         Q91377 gallus gall
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Q9c651 axabidopsis
Q8tcx7 homo sapien
Q73665 gallus gall
Q73587 scyliorhinu
Q9uhn5 homo sapien
Q8td99 homo sapien
Q8td99 homo sapien
Q8td99 homo sapien
Q8tcx2 homo sapien
Q8tcx4 homo sapien
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Q9ibd4 gallus gall
Q9ipc7 axabidopsis
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homo sapien
homo sapien
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98 mus musculu
14 gallus gall
157 arabidopsis
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Q9 AC Q9
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Best Local Similarity
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4	13	13	13	17	13	4	10	16	16	16	10	17	11	11	4	12	12	16	16	N	17	16	17	G	σ	4	10	13
Q9H8F5	Q07962	P87360	Q8UVGB	Q96ZG0	Q9DDB3	Q96ML2	Q9FX81	Q9HVX7	Q8RDG7	066762	Q9ZQE8	Q8ZW51	Q9CR78	Q9CYY5	Q96Н12	057159	Q9QJ13	Q97EW4	170X6D	Q9L7Z3	Q8TZ82	Q8XKN5	Q96ZV9	Q9GTK4	Q25994	Q8WWI2	048724	Q8UWF1
Q9h8f5 homo sapien		P87360 brachydanio	Q8uvg8 daboia russ		scyl	Q96ml2 homo sapien	Q9fx81 arabidopsis	Q9hvx7 pseudomonas	Q8rdg7 thermoanaer	O66762 aquifex aeo	Q9zqe8 arabidopsis	pyro	Q9cr78 mus musculu	9cyy5 mus	homo sa	57159 huma	human	Q97ew4 clostridium	Н	<		٠.	Q96zv9 sulfolobus	b	Q25994 plasmodium	Q8wwi2 homo sapien		Q8uwfl oncorhynchu

ALIGNMENTS

PRT;

60 AA.

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RESULT 2
Q91355
ID Q913
AC Q913
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Q91377;
Q1-NOV-1996 (TIEMBLrel. 01, Created)
Q1-NOV-1996 (TIEMBLrel. 01, Last sequence update)
Q1-NOV-1996 (TIEMBLrel. 17, Last annotation update)
Q1-JUN-2001 (TIEMBLrel. 17, Last annotation update)
Myosin heavy chain (Fragment)
Gallus gallus (Chicken)
Gallus gallus (Chicken)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Galliformes; Phasianidae; Phasianinae;
Q91355
Q91355;
                                                                                                                                                                                     100.0%; ilarity 100.0%; Conservative 0
               PRELIMINARY;
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                                                                                                                                                Score 32; DB 13; Length 60; Pred. No. 9.8;
               PRT;
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RESULT
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Q9GZR6;
Q1-MAR-2001
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Dev. B.O.1. 148:355-364(1991).
EMBL; S64689; AABD0271.1; -.
InterPro; IPR002928; Myosin_tail.
Pfam; PF01576; Myosin_tail; 1.
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01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-JON-2001 (TrEMBLrel. 17, Last annotation update)
Ventricular myosin heavy chain 1 (Fragment).
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Park K.-Y., Dalakas M.C., Goebel H.H., Ferrans Litvak S., Takeda K., Goldfarb L.G.; Submitted (SEP-1999) to the EMBL/GenBank/DDBJ EMBL; AF189281; AAG43460.1; -. EMBL; AF189280; AAG43459.1; -. InterPro; IPR001664; IF. Pfam; PF00038; filament; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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"Identification and characterization
myosin heavy chain, VMHC1: expression
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12;
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RA White O., Alonso J., Altafi H., Araujo R., Bowman C.L., Brooks S.Y.,
RA Buehler E., Chan A., Chao Q., Chen H., Cheuk R.F., Chin C.W.,
RA Chung M.K., Conn L., Conway A.B., Conway A.R., Creasy T.H., Dewar K.,
RA Chung M.K., Conn L., Conway A.B., Conway A.R., Creasy T.H., Dewar K.,
RA Gill J.E., Goldsmith A.D., Haas B., Hansen N.F., Hughes B., Hulzar L.,
RA Hunter J.L., Jenkins J., Johnson-Hopson C., Khan S., Khaykin E.,
RA Kim C.J., Koo H.L., Kremenetskaia I., Kurtz D.B., Kwan A., Lam B.,
RA Langin-Hooper S., Lee A., Lee J.M., Lenz C.A., Li J.H., Li Y.-P.,
RA Lin X., Liu S.X., Liu Z.A., Luros J.S., Maiti R., Marziali A.,
RA Militscher J., Miranda M., Nguyen M., Nierman W.C., Osborne B.I.,
RA Sala G., Peterson J., Pham P.K., Rizzo M., Rooney T., Rowley D.,
RA Sakano H., Salzerg S.L., Schwartz J.R., Shinn P., Southwick A.M.,
RA Sun H., Tallon L.J., Tambunga G., Toriumi M.J., Town C.D.,
RA Wu D., Yu G., Fraser C.M., Venter J.C., Davis R.W.;
Tsellana.";
Thallana.";
Thallana.";
Query Match
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QSTCR7;
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STRAIN-CV.
                                                        NON_TER
                                                                                                                                                                                                                                        01-JUN-2002 (TIEMBLIEL 21, Created)
01-JUN-2002 (TIEMBLIEL 21, Last sequence update)
01-JUN-2002 (TIEMBLIEL 21, Last annotation update)
Hypothetical 43.8 kDa protein (Fragment).
DKFZF761K0922.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nature 408:816-820(2000).
EMBL; AC082643; AAG50642.1;
Hypothetical protein.
SEQUENCE 144 AA; 16438 M
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Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; eudicottyledons; core eudicots; Rosidae;

eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hypothetical 16.4 kDa F9K23.1.
                                                                                               Wambutt R., Heubner D., Mewes H.W., Weil B., V
Submitted (MAR-2002) to the EMBL/GenBank/DDBJ
EMBL; AL713644; CAD28456.1; •.
                                                                                                                                                                                   Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
MCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-21016719; PubMed-11130712;
                                                                                   Hypothetical protein.
                                                                                                                                          TISSUE-AMYGDALA;
                                                                                                                                                          SEQUENCE FROM N.A.
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hes 6; Conserv
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6; Conserv
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                                                         386 AA;
100.0%;
llarity 100.0%;
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ilarity 100.0%;
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                                                         43779 MW;
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Score 32; DE
Pred. No. 61;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 32; DB
Pred. No. 23;
); Mismatches
                                                                                                                                                                                                   Craniata; Vertebrata; Catarrhini; Hominidae;
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                                                         F293388B200C7B65 CRC64;
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61;
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Best Local S
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01-AUG-1998 (TrEMBLrel. 07, Created)
01-AUG-1998 (TrEMBLrel. 07, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Desmin (Fragment).
Gallus (Chicken).
Eukpryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasiani
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-AUG-1998
01-NOV-1998
01-MAR-2002
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1. SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMEMBL; V15064; CAA75347.1; EMBL; AJ304374; CAC83054.1; Interpro; IPR001664; IF.
Interpro; IPR001664; IF.
Pfam; PF00038; filament; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chikuni K.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN-WHITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata;
Elasmobranchil; Galeomorphil;
Scyllorhinidae; Scyllorhinus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Desmin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Coiled coil; Intermediate filament
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR001664; IF. Pfam; PF00038; filament; 1. PROSITE; PS00226; IF; 1.
                                                                                                                                                                                                                                                                                                                                                            Schaffeld M., Schultess J.,
                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Submitted (SEP-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-MUSCLE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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      Coiled coil;
                                           PROSITE; PS00226; IF; 1
                                                                                                                                                                                                                                                                                                                                 Markl
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les 6; Conserv
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448 AA;
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nilarity 100.0%;
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         Intermediate filament.
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P-1998) to
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EMBL/GenBank/DDBJ (
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Galeoidea;
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; Carcharhiniformes;
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Q9H319;
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'01-MAR-2001 (Tr
'01-JUN-2001 (Tr
Mutant desmin
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MUTDESM.
Homo sapiens (Human).
Homo sapiens (Human).
Horia; Chordata;
Horia; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q9UHN5;
01-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q9UHN5
                                                   Pfam; PF
VARIANT
                                                                                                                                                                                                     Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSIE; rover, --.

Coiled coil; Intermediate filament.

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                                                               Submitted (JUL-1999) to the EMBL; AF167579; AAG41217.1; InterPro; IPR001664; IF. Pfam; PF00038; filament; 1.
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                                   SEQUENCE
                                                                                                                                      Goldfarb L.G.;
                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                          Homo sapiens (Human)
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Primates;
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Pred. No.
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Pred. No.
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                                                                                                                                                                                                                          Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
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     Score
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                                       1C2AEEAE4B4BB319 CRC64;
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RESULT 12
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AC Q8TAC
DT 01-JU
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Q8TCX2
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Best Local S
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Matches 6
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Q8TAC4
Q8TAC4;
01-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                               "Proline substitution in mutant desmin breaks the alpha-helical conformation and results in severe phenotype.";
Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AY083345; AAL99215.1;
SEQUENCE 470 AA; 53519 MW; 06EB5F052D6FE25C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases
EMBL; AF487828; AAL99078.1; -
SEQUENCE 470 AA; 53561 MW; BB51286FE75605DF CRC64;
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01-JUN-2002 (TrEMBLrel.
01-JUN-2002 (TrEMBLrel.
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Mammalia; Eutheria;
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Primates;
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A Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
ARA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
ARA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
ARA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
ARA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
ARA Fleischmann W., Gassterland T., Gissi C., King B., Kochiwa H.,
ARA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
ARA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
ARA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
ARA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
ARA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
ARA Blake J., Boffelli D., Bojunga N., Carninol P., Ge Bonaldo M.F.,
ARA Bulake J., Boffelli D., Bojunga N., Carninol P., Ge Bonaldo M.F.,
ARA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
ARA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
ARA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
ARA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
ARA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
ARA Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
ARA Wayshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
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01-JUN-2001 (TrEMBLrel. 1
01-JUN-2001 (TrEMBLrel. 1
01-MAR-2002 (TrEMBLrel. 2
8430436810R1k protein.
-I- SIMILARITY: BELONGS TO EMBL; AK018458; BAB31223.1; HSSP; P00179; 1DT6. MGD; MGI:1918769; 8430436A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Goudeau B., Dagvadorj A., Rodrigues-Lima F., Nedellec P. Casteras-Sinon M., Perret E., Langlois S., Goldfarb L., Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases. EMBL; AF486807; AAL93205.1; -. SEQUENCE 470 AA; 53504 MW; 1B5C44024DE11869 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Goudeau B., Dagvadorj A., Rodrigues-Lima F., Nedellec P., Casteras-Simon M., Perret E., Langlois S., Goldfarb L., Vicart P.; "Structural and functional analysis of a new desmin variant causing desmin-related myopathy."; Hum. Mutat. 18:388-396(2001).
                                                                                               Hayashizaki Y.;
"Functional annotation of a
Nature 409:685-690(2001).
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Mammalia; Eutheria;
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Mammalia; Eutheria;
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Rodentia;
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Catarrhini; Hominidae;
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Pfam; PF00067; P450; 1.
PRINTS; PR00385; P450.
Heme; Monooxygenase; Ox
SEQUENCE 501 AA; 573
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PRINTS; PR00194; TROPOMYOSIN.
PRODOM; PD000355; myosin_head; 1
SMART; SM00015; IQ; 1.
SMART; SM00242; MYSC; 1.
SEQUENCE 1937 AA; 223473 MW;
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01-CCT-2000 (TrEMBLrel. 15, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Myosin heavy chain.
Myosin heavy chain.
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Galliformes; Phasianidae; Phasianinae;
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STRAIN-WHITE LEGHORN; TISSUE-HEART;

MEDLINE-20149854; PubMed-10684978;

Machida S., Noda S., Furutani Y., Ti
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InterPro; IPR001609; myosin_head.
InterPro; IPR004009; myosin_n.
InterPro; IPR002928; Myosin_tail.
InterPro; IPR000533; Tropomyosin.
Pfam; PF00612; IQ; 2.
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EMBL; AB032197; BA/
HSSP; P08799; IMND
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                                      09LVE7
09LVE7;
01-OCT-2000 (TrEMBLrel. 15,
01-OCT-2000 (TrEMBLrel. 15,
01-OCT-2000 (TrEMBLrel. 15,
Emb|CAB45990.1.
Arabidopsis thallana (Mouse-ear cress).
Eukaryota; Viridiplantae; Streptophyta;
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Pfam; PF02736; Myosin_N; 1.
Pfam; PF01576; Myosin_tail; 1.
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Pred. No.
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     Embryophyta; Tracheophyta;
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                                                                                          "Structural analysis of Arabidopsis thaliana chromosome 3 features of the regions of 4,504,864 bp covered by sixty clones.";
DNA Res. 7,131-135(2000).
EMBL; AB019232; BAB02354.1; -
SEQUENCE 241 AA; 25848 MW; F90851E55592DCE9 CRC64;
                                                                                                                                                                                                                         Sato S., Nakamura Y.,
Submitted (OCT-1998)
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115 KKIHEE
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to the EMBL/GenBank/DDBJ databases
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2: /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1981.DAT:*

3: /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1982.DAT:*

4: /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1983.DAT:*

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10	28	96.6		21	AAG38597	Arabidopsis thalia

Diagnosing spongiform or demyelinating disease in vertebrates such as bovine spongiform encephalopathy and Creutzfeld-Jacob disease comprises

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ALIGNMENTS

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XX Human; cow; myelin; myelin neurofilament; immunogen; antigen; bovine spongiform encephalopathy; BSE; multiple sclerosis; Creutzfeld-Jacob disease; CJD; demyelinating disease; diagnostic test. AAB05931 standard; peptide; 6 AA. Bos taurus. Homo sapiens. (UNLO) KING'S COLLEGE. 26-NOV-1998; 02-JUN-2000. WO200031545-A1. Test antigen #7 for spongiform and demyelinating disease diagnosis. 17-OCT-2000 (first entry) AAB05931; 25-NOV-1999; 98GB-0025948 99WO-GB03936

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The present peptide may be used as a test antigen in a kit for diagnosing spongiform or demyelinating disease in vertebrates, including bovine spongiform encephalopathy (BSE), multiple sclerosis (MS) and Creutzfeld-Jacob disease (CJD). Peptides used in the kit are antigenic components of myelin or myelin neurofilaments. Biological samples are assayed for antibodies, especially IgA antibodies, which bind to myelin and/or myelin neurofilaments or an antigenic peptide, such as the present sequence. Any reading in excess of two standard deviations of the healthy controls would indicate a positive response.
                                                                                                                                                                                                                                                                                                                                                                        Diagnosing spongiform or demyelinating disease in vertebrates such as bovine spongiform encephalopathy and Creutzfeld-Jacob disease comprises assaying a biological sample for myelin and/or myelin neurofilament antibodies -
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bovine spongiform encephalopathy; BSE; multiple sclerosis;
Creutzfeld-Jacob disease; CJD; demyelinating disease; diagnostic test.
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This invention describes a novel method for the diagnosis of a disease caused by, or associated with, an RNA molecule that has a frameshift mutation. The method is used to diagnose age-related diseases, especially cancer and a wide range of neurodegenerative disorders (e.g. Alzhaimer's disease, Down's syndrome, myotonic dystrophy, Huntington's disease, multiple sclerosis, alcoholic liver disease, diabetes mellitus type II and many others listed) or susceptibility to these disorders. The method allows a definitive diagnosis of Alzheimer's disease in living patients, at an early stage. It is based on the observation that disease may be caused by mutations in RNA rather than DNA. The invention describes the used of neuronal system RNA molecules, specifically proteins including beta-amyloid precursor protein (beta-APP), the microtubule associated proteins Tau and Big Tau, ubiquitin B, apolipoprotein E, microtubule
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                                                                                                                                                                                                                                                                                              Diagnosing disease by detecting frameshift mutations in RNA or corresponding protein mutations - used to diagnose cancer and neurological diseases, particularly Alzheimer's disease, and also for treatment and prevention with specific ribozymes or wild-type
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N-PSDB; AAX75758.
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(ROYA-) ROYAL NETHERLANDS ACAD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              associated protein 2 (MAP2), neurofilament-L, neurofilament-M, neurofilament-F, presenilin I, presenilin II, gliai fibriliary acidic protein (GFAP), the cellular tumour antigen p53, B-cell leukemia/lymphoma 2 (bcl-2) proto-oncogene, semaphorin III, HUPF-1, high mobility group protein-C (HMGP-C) and neuroendocrine specific protein A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAM93466 standard; Protein; 543
                                                                                                            isolated and nucleotide sequences of 5'- and 3'-ends of the cDNA molecules have been determined. Primers for synthesising the full length cDNA are useful for clarifying the function of the protein encoded by the cDNA. The full length clones were obtained by construction of full length enriched cDNA libraries that were synthesised by the oligo-capping method. The primers enable the production of the full length cDNA easily without any special methods. The present sequence is a polypeptide encoded by a full length human cDNA of the invention.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in CD-ROM format directly from EPO.
                                                                                                                                                                                                                                                                                                                                                              Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-SEP-2001.
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                                                                                                                                                                                                                                                                                                                        The invention relates to
                                                                                                                                                                                                                                                                                                                                                                                               830 Primers useful for synthesizing full length cDNA clones use in genetic manipulation - \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-524255/58.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wakamatsu A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ota T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-JUL-2000; 2000EP-0114089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
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EIRDLR 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              polypeptide,
                                                                                                                                                                                                                                                                                                                                                              8;
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                                                                                                                                                                                                                                                                                                                                                              SEQ
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                                                                          543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000JP-0118774.
2000JP-0183765.
                                                                                                                                                                                                                                                                                                                                                            ID NO 3132; 1380pp + sequence listing; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sugiyama
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100.0%; Pr
               100
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a T, Nagai K, Kojima
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                 000
                                                                                                                                                                                                                                                                                                                       primers for synthesising full length
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Pred. No. 3.2
); Mismatches
                 Score 29;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                $
   Mismatches
                                                                                                                                                                                                                                                                                   human protein have been '- and 3'-ends of the cDNA
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3.2e+02;
thes 0;
                   4e+02;
                                     DB 22;
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S, Otsuki
                                   Length 543;
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T, Koga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           441;
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Similarity 5; Conserv

Conservative

96.6%; 83.3%;

Score 28; DB 22; Pred. No. 1.2e+02; 1; Mismatches 0

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Indels

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                         cc pustulosis, hypertosis and osteomyelitis), uveitis and endophthalmitis.

cc P. acnes is also involved in infections of bone, joints and the central constraints system, however it is particularly involved in the inflammatory cc lesions associated with acne vulgaris. A method for detecting the cc presence or absence of P. acnes in a patient comprises contacting the cc sample with a binding agent that binds to the proteins of the invention and determining the amount of bound protein in the sample. The cc polypeptides may be used as antigens in the production of antibodies cc specific for P. acnes proteins. These antibodies can be used to cc downregulate expression and activity of P. acnes polypeptides and cc diagnostic agents for determining P. acnes presence, for example, by cc enzyme linked immunosorbent assay (ELISA).

cc Note: The sequence data for this patent did not form part of the printed consection, but was obtained in electronic format directly from WIPO cc at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              uveitis; endophthalmitis; bone; joint; central nervous system; ELISA; inflammatory lesion; acne vulgaris; enzyme linked immunosorbent assay; dermatological; osteopathic; neuroprotectant.
                                                                                                                                                                                                                                                                                         Sequences AAU39105-AAU68017 represent Propionibacterium acnes im polypeptides. The proteins and their associated DNA sequences at the treatment, prevention and diagnosis of medical conditions or p. acnes. The disorders include SAPHO syndrome (synovitis, acne.
                                                                                                                                                                                                                                                                                                                                                                                                        Propionibacterium acnes vaccinating against and treating acne vulgaris -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-APR-2000; 2000US-199047P
02-JUN-2000; 2000US-208841P
07-JUL-2000; 2000US-216747P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Propionibacterium acnes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Skeiky YAW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-APR-2001; 2001WO-US12865
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DB; AAS59635.
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e J, Zhang Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                          25005; 1069pp;
                                                                                                                                                                                                                                                                                                                                                                                                                       polypeptides and nucleic acids useful for diagnosing infections, especially useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mitcham JL, Wang SS,
, Jen S, Carter D;
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05-MAR-1999;
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hybridisation assay; genetic mapping; gene expression control; promoter;
termination sequence.
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RESULT 7
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EVRDLR
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99US-015106.
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99US-0161161.
99US-0161161.
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1; Mismatches
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4e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Protein identification; signal transduction pathway; metabolic hybridisation assay; genetic mapping; gene expression control; termination sequence.
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promoter;
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RESULT 8
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AC ABB9
XC ABB9
XX
DT 31-M
XX
DE Herb
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                                                                                                                                     Query Match 96.9
Best Local Similarity 83.3
Matches 5; Conservative
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22-SEP-1999
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Herbicidally active polypeptide SEQ
              31-MAY-2002
                             ABB92267;
                                          АВВ92267
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| EVRDLR 98
                                          standard;
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               (first entry)
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                                          Protein; 338
                                                                                                               96.6%;
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4e+02;
 NO 1478
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                                                                                                                     Length 338;
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RESULT 9.
ABB57243
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Best Local S
Matches 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Identifying plant target proteins for herbicidally active compounds, comprising aligning and comparing nucleic acid or amino acid sequences from plant with nucleic acid or amino acid sequences from non-plant organisms -
                                                                                                                                                           vasospastic
                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (FARB ) BAYER AG.
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Ishikawa
                                                                   18-MAY-2001; 2001WO-JP04192
                                                                                           22-NOV-2001
                                                                                                                W0200188188-A2
                                                                                                                                       Mus musculus.
                                                                                                                                                                          Mouse; ischaemia;
                                                                                                                                                                                               Mouse ischaemic
                                                                                                                                                                                                                      07-MAR-2002
                                                                                                                                                                                                                                                                   ABB57243 standard; Protein; 403 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                            useful as herbicides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to identifying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-269010/31.
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                     (UYNI-) UNIV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                plant; agriculture; herbicide.
                                                                                                                                                            ischaemia;
                                                                                                                                                                                                                                                                                                                                                                        Conservative
                     NIHON SCHOOL JURIDICAL PERSON
Asa1
                                            2000JP-0145977.
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                                                                                                                                                                                              condition related protein sequence
ß
                                                                                                                                                            compressive ischaemia; occlusive ischaemia; emia; ischaemic condition; ischaemic disease
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Takahashi Y,
                                                                                                                                                                                                                                                                                                                                                                       Score 28; DB
Pred. No. 4e+C
1; Mismatches
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Nagata
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4e+02;
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990S-0123180 990S-0123580 990S-0125788 990S-0126264 990S-0126785 990S-0128734 990S-0128714 990S-0129845 990S-0130047 990S-0130045

05-MAR-1999; 09-MAR-1999;

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2000EP-0301439

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RESULT 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes a method for examining ischaemic conditions, comprising measuring the expression levels of particular genes (I) in a test sample or determining the expression profile of a gene group in the sample comprising genes selected from (I). The method is useful for examining the ischaemic condition (e.g. compressive ischaemia, occlusive ischaemia or vasospastic ischaemia) by measuring expression levels of particular genes (AB199202 to AB19912, encoding the protein sequences in ABB57020 to ABB57374) or by determining the expression profile of a gene group comprising these genes. The expression levels or expression profiles produced by these genes are used as an indicator when screening for ischaemic condition improving drugs or therapeutics for ischaemic diseases. AB19913 and AB19914 represent PCR primers for a mouse ischaemic condition related sequence, which are used in the exemplification of the present invention.
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Matches 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI;
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                                                                                                                                                                                                                                                                                      Arabidopsis thaliana.
                                                                                                                                                                                                                                                                                                                                                                      Arabidopsis thaliana protein fragment SEQ ID
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                                                                                                                                                                                                                                                                                                                              Protein identification; signal transduction pathway; metabolic pathway; 
hybridisation assay; genetic mapping; gene expression control; promoter;
                                                                                                                                                                                                                                                                                                                 termination
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5; Conserv
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83
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Pred. No. 4.8e
1; Mismatches
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4.8e+02;
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908-0159-29 908-0158-23 908-0158-23 908-0159-29 908-0159-29 908-0159-29 908-0159-33 908-0159-33 908-0159-33	9908-0145089 9908-0145145 9908-01451218 9908-0145276 9908-0145913 9908-0145913 9908-0145913 9908-0145913 9908-0145913 9908-0147302 9908-0147302 9908-0147302 9908-0147303 9908-0147493 9908-0147303 9908-0147493 9908-0147493 9908-0147493 9908-0147493 9908-0147493 9908-0147493 9908-0149136 9908-0149136 9908-0149136 9908-0149136 9908-0149139 9908-0149139 9908-0149139 9908-01510884	905-014481 905-014508 905-014508

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The present invention provides the protein and coding sequences of cDNAs isolated from human, murine and rat skin cell libraries. The sequences can be used in the development of therapeutic agents useful in the treatment of skin diseases, including skin wounds, cancer, growth
                                                                                                       Claim
                                                                                                                                            growth and modulating
                                                                                                                                                          New polynucleotides and polypeptides encoded by the polynucleotides isolated from skin cells, useful for treating skin wounds, cancers, growth and developmental defects, inflammatory diseases, or for
                                                                                                                                                                                                                                                                                                      Watson JD,
                                                                                                                                                                                                                                                                                                                                                                                     24-MAY-2000;
25-JUL-2000;
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developmental defect;
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DB; ABL35016.
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5; Conservative
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                                                                                                                                            immune responses
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2000US-221232P.
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9903-0161350.
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Pred. No. 1.3e+03;
1; Mismatches (
                                                                                                     English
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e; dermatological;
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RESULT 12
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ID ABB49729
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The present invention relates to the genome sequence of Listeria monocytogenes EGD-e (see ABA0304). The genome sequence and fragments of it are useful for selecting probes and primers for detecting genes in L. monocytogenes and related organisms, and for studying genetic polymorphisms and other genomes. The present sequence is a protein encoded by the genome sequence of the present invention. Proteins expressed from the genome sequence are useful for raising specific antibodies, identification of L. monocytogenes and related organisms, and for biosynthesis and biodegradation, especially biosynthesis of Vitamin Bl2. The genome sequence and proteins encoded by it are also useful for selecting compounds that regulate gene expression and cell replication and modulate L. monocytogenes-related diseases. In addition, the genome sequence and proteins encoded by it are useful in pharmaceutical and vaccines compositions for the treatment or prevention of infections by L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 5
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Dussurget O, Chetou....

Daniels J, Goebel W, Kreft

Dominguez-Bernal G, Garrido.

Chakraborty T, Domann E, H

Chakraborty T, Baquero F, (
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                                                                                                                                                                                                                                                                                                                                                                                                          Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Antibacterial; gene therapy; vacci vitamin B12; bacterial infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and prevention
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5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                        SEQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Listeria monocytogenes, useful e.g. for steria and related bacterial infections,
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Nedjari H,
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1; Mismatches
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tion; disease.
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. 5.1e+02;
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, Glaser P
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Cossart P;
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RESULT 13
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                                                                                                                                                                                                                                                                                                                 The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The inventiuseful in developmental biology and in elucidating cell signalling cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL101840-ABL16175) and the encoded proteins sequences (ABL101840-ABL16175) and the encoded proteins
                                                                                                                                                                                                                                   The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; SEQ ID NO 5415; 21pp + Sequence Listing; English.
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Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signalling and cell-cell
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11-JUL-2000; 2000US-0614150.
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1 EIRDLR 6
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                                                                                                                                                                                       323 AA;
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                                                                                Conservative
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                                                                          Score 27; DB 22;
Pred. No. 6.2e+02;
1; Mismatches 0;
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5.7e+02;
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ABP 2763

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                                                                                                                                                                                                                                                                                                streptococcus/GBS (Streptococcus agalactiae) or group A streptococcus/GAS (Streptococcus/GBS), comprising one of 5483 sequences (S1), given in the specification. The proteins have antibacterial and antiinflammatory activity. (I), nucleic acids encoding (I), ABN66044-ABN7126 and antibodies that bind (I) are used in the manufacture of medicaments for the treatment or prevention of infection or disease caused by Streptococcus bacteria, particularly S. agalactiae and S. pyrogenes.

Nucleic acids encoding (I) are used to detect Streptococcus in a biological sample. (I) is used to detect Streptococcus in a biological sample. (I) is used to detect acid encoding (I), may be used as a vaccine or diagnostic composition. The disease caused by Streptococcus that is prevented or treated may be meningitis. Nucleic acid encoding (I) may be used to recombinantly produce (I) and may be used in gene therapy. Antibodies to (I) are used for affinity activities of the process of the proc
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Best Local Similarity
Matches 5; Conserv
                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New Streptococcus protein for the treatment or prevention of infection or disease caused by Streptococcus bacteria, such as meningitis, and for detecting a compound that binds to the protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-OCT-2000; 2000GB-0026333
24-NOV-2000; 2000GB-0028727
07-MAR-2001; 2001GB-0005640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Streptococcus; GAS; GBS; group B streptococcus; Streptococcus agalactiae; group A streptococcus; Streptococcus pyogenes; antibacterial; antiinflammatory; infection; vaccine; meningitis; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-352536/38.
N-PSDB; ABN68263.
                                                                                                                                                                                                                                                                          Streptococcus proteins.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 3605; 4525pp; English.
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(GENO-) INST GENOMIC RES
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RESULT 15
AAB31943
The present sequence represents a partial dnaX polypeptide. The specification describes DNA molecules from Gram positive bacteria, which comprise a coding region from a polc, dnaE, holA, holB, dnaX, dnaN, sab, dnaG or a dnaB gene. These sequences encode proteins that replicate the chromosome of Gram positive bacteria. They are used for sequencing and amplification of DNA and in drug discovery to identify compounds which have antibotic activity through interference with replication. They are used in methods for identifying compounds that are active at the level of DNA replication and result in arrest of cell growth or cell death of bacteria to treat bacterial infections in
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Misc-difference
                                                                                                                                                                          Claim 77; Page 60-61; 239pp; English.
                                                                                                                                                                                                     Isolated DNA molecule from a Gram positive bacterium encoding DNA replication proteins used to identify compounds which have antibiotic activity
                                                                                                                                                                                                                                                                                                                                                                28-JUL-2000;
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dnaG; dnaB; antibiotic; replication; cell growth; cell death;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAB31943;
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                        animals.
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N-PSDB; AAF54743.
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                                         Score 27; DB 22; Pred. No. 1.1e+03;
                                 Mismatches
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Search completed: November 13, 2002, Job time: 30.7447 secs

13:22:11

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Title:
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length: 2000000000
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US-08-928-213B-11
2 US-08-328-213B-11
2 US-08-457-880A-9
2 US-08-444-622A-9
3 US-08-444-622A-9
3 US-08-441-104A-3
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US-08-846-762-12
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US-09-134-001C-5232
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20.336 Million cell updates/sec
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US-08-898-780A-2	US-09-071-709-1	US-08-858-207A-366	US-09-181-318-2	US-08-650-275-2	US-08-576-626A-45	US-09-457-040B-30	US-09-096-245-3	US-08-919-627-3	US-08-713-828-3	US-09-106-582-70	US-09-295-028-70	US-08-975-762-70	US-08-855-910-8	US-09-134-001C-5004	US-08-117-083-65	US-09-347-803-14	US-09-111-470-8
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ALIGNMENTS

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TYPE: amino acid

STRANDEDNESS: not relevant

TOPOLOGY: not relevant

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO:

US-08-928-213B-24
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US-08-928-213B-24
                                                                                                                                                                                                                                                    COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/928,213B
FILING DATE: 12-Sep-1997
CLASSIFICANION: «Unknown»
ATTORNEY/AGENT INFORMATION:
NAME: MACKINIPH, Kamrin T.
REGISTRATION NUMBER: 38,230
REFERENCE/DOCKET NUMBER: ENZYCO-02550
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 195-8410
TELECOMMUNICATION 24:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
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Patent No. 6238905
GENERAL INFORMATION:
APPLICANT: MCHenry, Charles
Seville, Mark
                                                     Best Local Similarity Matches 5; Conserv
                                                                                          Query Match
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ADDRESSEE: MEDLEN & CARROLL, LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cull, Millard G.
TITLE OF INVENTION: NOVEL THERN
HOLDENZYME
NUMBER OF SEQUENCES: 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: CA
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                                                                                                                                                                                                                                        LENGTH: 71 amino acids
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                                                       Conservative
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                                                                     93.1%;
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NOVEL THERMOPHILIC POLYMERASE III
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              oppy disk
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                                                     Score 27; DB Pred. No. 31; 1; Mismatches
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                                                                                                                                                24:
                                                                                          DB 4;
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atent No. 6238905
GENERAL INFORMATION:
                                                                                                                                                                                                                             equence 9, Application US/08359705B
atent No. 5844092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version
CURRENT APPLICATION NUMBER: US/08/928,213B
FILING DATE: 12-Sep-1997
CLASSIFICATION : (Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: MACKN19ht, Kamrin T.
REGISTRATION NUMBER: 38,230
REGERENCE/DOCKET NUMBER: ENZYCO-02550
TELEPHONE: 415-705-8410
TELEPHONE: 415-795-8338
                                                                                                      CORRESPONDENCE ADDRESS
                                                                                                                       NITLE OF INVENTION: Human trk Receptors and Neurotrophic Factor Inhibitors NUMBER OF SEQUENCES: 41
                                                                                                                                                                                                                                                                                                                                      110 EIRDIR 115
                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity es 5; Conserv
              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                         1 EIRDLR 6
                                                                                     DDRESSEE:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: not relevant
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 11:
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Seville, Mark
                                                                                                                                                                                                              INFORMATION:
94080
                                                  South San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acids
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                                 California
                                                                      1 DNA Way
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Urfer, Roman
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                                                                                                                                                                                              Presta, Leonard G.
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ET: 220 Montgomery Street, Suite 2200
                                                                                 Genentech, Inc.
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                                                                                                                                                                           David L.
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Pred. No.
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb:
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
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LENGTH: 790 amino acid
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APPLICATION NUMBER: 08/2:
FILING DATE: 03/18/94
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/10/94
                                                             ATTORNEY/AGENT INFORMATION:
NAME: TOTCHLA, PhD., TINCTHY E.
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: P0873P
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
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CITY: South San Francisco
STATE: California
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                               APPLICATION NUMBER: US/0 FILING DATE: 05-Aug-1994 CLASSIFICATION: 435
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                              TELEFAX:
                                              TELEPHONE:
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Amino Acid
            NE: 415/225-8674
: 415/952-9881
910/371-7168
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Shelton, David L.
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Pred. No.
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US-08-457-880A-9
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RESULT 6
US-08-444-622A-9
; Sequence 9, Application US/08444622A
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Best Local Similarity
Matches 5; Conserv
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legal No. 5910574
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LENGTH: 790 amino acids
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APPLICATION NUMBER: US/08/444,622
FILING DATE: 19-May-1995
APPLICATION NUMBER: 08/286846
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
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83 ELRDLR 88
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                                                                                                                                                                                                                                                                                                                  NAME: Torchia, PhD., Timoth REGISTRATION NUMBER: 36,700 REFERENCE/DOCKET NUMBER: PO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatibl
OPERATING SYSTEM: PC-DOS/M
                                                                       83 ELRDLR 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/457,880A
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                                                                                          EIRDLR 6
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Amino Acid
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                                                                                                                               Conservative
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                                                                                                                                             93.1%;
83.3%;
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                                                                                                                                                                                                                                                                                                                                        Timothy E.
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Pred. No. 3
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US-08-942-562-9
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                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 790 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 5
ATTORNEY/AGENT INFORMATION:
NAME: TOrchia, PhD., Timoth
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: PO
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION: TELEPHONE: 650/225-8674
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APPLICATION NUMBER:
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                                                                                                                                                               CORRESPONDENCE ADDRESS
                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                             ITLE OF INVENTION: Human trk Receptors and Neurotrophic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/08/444,622A FILING DATE: 19-May-1995
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                                                                                                               STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
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                                                                                                                                                ADDRESSEE:
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                                                                    94080
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Amino Acid
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                                                                                                    California
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                                                                                    USA
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                                                                                                                                              Genentech, Inc.
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                                                                                                                                                                                                                                           David L.
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                                      1.44 Mb floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 27;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       P0873P1C3
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APPLICATION NUMBER:

US/08/942,562

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ent No. 6153189
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LENGTH: 790 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: WinPatin (Ge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk

COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VILLE OF INVENTION: Human trk Receptors and Neurotrophic Factor Inhibitors
VORREESPONDENCE ADDRESS:
ADDRESS: The Property of t
                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 08/286846
FILING DATE: 10-AUG-1994
PRIOR APPLICATION DATA:
                                                                                                                                                                                       APPLICATION NUMBER: 08/2
FILING DATE: 18-MAR-1994
TTORNEY/AGENT INFORMATION:
                                 ELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 08/359,705
FILING DATE: 20-DEC-1994
RIOR APPLICATION DATA:
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FILING DATE: 19-May-1995
ITORNEY/AGENT INFORMATION:
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les 5; Conserv
                                                                               REGISTRATION NUMBER: 33,055
REFERENCE/DOCKET NUMBER: GE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 18-SECLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                NAME: Dreger, Ginger REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Newport Beach
STATE: California
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 EIRDLR 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E: Knobbe, Martens, Olson & Bear 620 Newport Center Drive 16th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Shelton, Dav.
Urfer, Roman
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949/760-0404
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                                                                               GENENT.33CP2C1
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Pred. No.
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Best Local S
Matches 5
                                                     Query Match
Best Local Similarity
Matches 5; Conserv
                                                                                                                                                    INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 814 amino acic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
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LENGTH: 790 amino acid
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 08/1: FILING DATE: 20-DEC-1993 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                   FILING DATE: 23-NOV-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
107 ELRDLR 112
                                                                                                                                                                                                    TELEPHONE: 415/22-9881
                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS SOFTWARE: patin (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
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es 5; Conserv
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                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                       NAME: Lee, Wendy M. REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
                            1 EIRDLR 6
                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
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                                                                                                                                          amino acid
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Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/08286305A
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                                                                                                                                                         814 amino acids
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Sadick, Michael D.
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                                                        Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                     05-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wai Lee Tan
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83.3%;
                                                                     93.1%;
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                                                                                                                                                                                                                                                                                                                                 08/157563
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                                                                    Score 27;
Pred. No.
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Pred. No.
                                                                     DB 1;
4.1e+02;
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                                                                                 Length 814;
                                                          Indels
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Application US/08441104A

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Query Match
Best Local Similarity
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                                                                                                                                                  US-08-440-816A-3
                                                                                                                Sequence 3, Application US/08440816A Patent No. 5914237
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SEQUENCE CHARACTERISTICS:
                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 08/1 FILING DATE: 23-NOV-1993 ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 85
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/225-1994
TELEFAX: 415/952-9881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/286305
FILING DATE: 05-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: patin (Genen CURRENT APPLICATION DATA:
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MEDIUM TYPE: 3.5 inc
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                                                                                                                                                                                                                    107 ELRDLR 112
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TLE OF INVENTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: 3.5 inch, 720 Kb floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: patin (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 08/170558 FILING DATE: 20-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08 FILING DATE: 15-MAY-1995
                                                                                                                                                                                                                                     1 EIRDLR 6
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                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                   I: 814 amino acids amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mark, Melanie R.
Sadick, Michael D.
Shelton, David L.
                                                                 Mark, Melanie R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           USA
            Sadick, Michael D.
Shelton, David L.
Wong, Wai Lee Tan
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                                                                                                                                                                                                                                                                                    Conservative
                                                                                 Godowski, Paul J.
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KINASE RECEPTOR ACTIVATION ASSAY
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Pred. No. 4.1e+02;
                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                   Length 814;
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US-09-417-381A-3
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                                                                                ORGANISM: Homo Sapien US-09-417-381A-3
Query Match
Best Local Similarity 83.3
"`^+^hes 5; Conservative
                                                                                                             SEQ ID NO 3
LENGTH: 814
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                 Sequence 3, Application US/09417381A Patent No. 6287784
                                                                                                                                                                         TITLE OF INVENTION: KINASE RECEPTOR ACTIVATION ASSAY
FILE REFERENCE: P0854C1P2C1
CURRENT APPLICATION NUMBER: US/09/417,381A
CURRENT FILING DATE: 1999-10-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 415/952-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO:
                                                                                                                                                            NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                       APPLICANT:
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                                                                                                                                                                                                                                         PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 814 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: 85
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/225-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 23-NOV-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS
SOFTWARE: patin (Genentech)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM: MEDIUM TYPE: 5.25 inch,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 20-DEC-1993 PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 460 Point San Bruno Blvd CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
mes 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 08/170558 FILING DATE: 20-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 08/2: FILING DATE: 05-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/440,816A FILING DATE: 15-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 08/157563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 EIRDLR 6
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                                                                                                                                                                                                                                                      Sadick, Michael D. Shelton, David L.
                                                                                                                                                                                                                                                                                       Mark, Melanie R.
                                                                                                                                                                                                                                      wong,
                                                                                                                                                                                                                                                                                                    Godowski, Paul J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: 5.25 inch, 360 Kb floppy disk
                                                                                                                                                                                                                                      Wai Lee Tan
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83.3%;
                                   93.1%;
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                 Score 27; DB pred. No. 4.1e.
1; Mismatches
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Pred. No.
                 . 4.1e+02;
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                                                Length 814;
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107

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CURRENT APPLICATION NUMBER: US/09/541,782
CURRENT ETLING DATE: 2000-04-03
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FEBSLEEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 1184
TYPE: PRT
ORGANISM: A. nidulans
US-09-541-782-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Sequence 2, Application US/09541782
    patent No. 6284480
; GENERAL INFORMATION:
    APPLICANT: Nislow, Corey
    APPLICANT: Sakowicz, Roman
    APPLICANT: Beraud, Christophe
    TITLE OF INVENTION: Antifungal Assay
    FILE REFERENCE: 1015
                                                                              RESULT 15
US-07-803-622E-7
                                                                                                                                                 밁
                                                                                                                                                                                                                                                                           : NUMBER OF SEQ ID NOS: 10
: SCPTWARE: FASTSEQ for Windows Version 4.0
: SEQ ID NO 2
: LENGTH: 1184
: TYPE: PRT
: ORGANISM: A. nidulans
US-09-723-820-2
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Best Local Similarity
"--+hes 5; Conserv
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US-09-723-820-2
                                                 Sequence 7, Applic Patent No. 5525497
                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2, Application US/09723820 Patent No. 6468760
                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/723,820 CURRENT FILING DATE: 2000-11-28
                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 09/541,782 PRIOR FILING DATE: 2000-04-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Nislow, Corey
                                                                                                                                                                                                                                                                                                                                                                                                                                                           PPLICANT: Sakowicz, Roman
PPLICANT: Beraud, Christophe
ITLE OF INVENTION: Antifungal Assay
ILE REFERENCE: 1015
 APPLICANT:
                                                                                                                                               680 EIKDLR 685
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nes 5; Conserv
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                                  INFORMATION:
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                                                               Application US/07803622E
Keller, Walter
Lingner, Joachim
                                                                                                                                                                                                                Conservative
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Pred. No.
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Pred. No. 9.9e+02;
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Search completed: November 13, 2002, 13:18:09 Job time: 10.6809 secs

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Query Match
Best Local Similarity
~~~hes 4; Conserve
                                                                                                                                            US-07-803-622E-7
                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
2IP: 90017
2IP: 90017
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/803,622E
FILING DATE: 27-NOV-1991
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REGISTRATION NUMBER: 32,327
REGISTRATION NUMBER: 32,327
                                                                                                                                                                         INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
SEQUENCE SEATION ACIDS
LENGTH: 375 EMINO ACIDS
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                       TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: 213-489-1600
TELEFAX: 213-955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
142 EVKDLR 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 611 West:
CITY: Los Angeles
STATE: CA
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                                 1 EIRDLR 6
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611 West Sixth Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Martin, Georges
Wahle, Elmar
VENTION: RECOMBINANT POLY(A) POLYMERASE
                                                                      Conservative
                                                                                     86.2%;
                                                                                       Score 25;
Pred. No.
                                                                      Mismatches
                                                                                       8e+02
                                                                                                      Length 375;
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GenCore version 5.1.3 Copyright (c) 1993 - 2002 Compugen Ltd.

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Result
No.
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Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. 1s the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           seq length: 0
seq length: 2000000000
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29
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22.121.Million cell updates/sec
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      93.1
93.1
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./cgn2_6/ptcdata/2/pubpaa/US06_NEW_PUB.pep:*
./cgn2_6/ptcdata/2/pubpaa/US06_NEW_PUB.pep:*
./cgn2_6/ptcdata/2/pubpaa/US06_PUBCOMB.pep:*
./cgn2_6/ptcdata/2/pubpaa/US07_NEW_PUB.pep:*
./cgn2_6/ptcdata/2/pubpaa/US07_NEW_PUB.pep:*
./cgn2_6/ptcdata/2/pubpaa/US07_NEW_PUB.pep:*
./cgn2_6/ptcdata/2/pubpaa/US08_PUBCOMB.pep:*
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10 US-09-815-242-12503
US-10-008-355-5
10 US-09-815-242-5164
US-09-905-291A-213
10 US-09-925-299-861
10 US-09-909-320-213
10 US-09-909-0888-213
10 US-09-815-242-11868
10 US-09-815-242-11868
10 US-09-815-242-11869
10 US-09-815-242-11869
10 US-09-815-242-11869
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US-09-764-878-151

US-09-741-669-345

US-09-815-242-5292

US-09-815-242-12503
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US-09-815-242-10580
US-09-966-147-9
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                                       sequence 9, Appli
sequence 151, Appli
sequence 152, App
sequence 345, App
sequence 12503, Ap
sequence 12503, App
sequence 213, App
sequence 119,8, A
sequence 119,8, A
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Sequence 10580, A
Sequence 9, Appli
Sequence 3, Appli
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82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
537	524	521	502	502	502	502	494	483	406	406	398	387	378	378	376	348	288	238	223	161	139	136	118	77	77
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US-09-945-301-2	US-09-764-853-731	US-09-886-404-21	US-10-052-586-400	US-10-006-867-158	US-09-778-971-5	US-09-886-404-18	US-10-108-605-115		US-09-765-205-8	US-09-978-295A-309	US-09-815-242-13171	US-09-771-161A-188	US-09-798-042-70	US-09-159-469-70	US-09-894-998-39	US-09-815-242-10718	US-09-778-971-6	US-09-862-802-8	ιл	US-09-925-302-761	US-09-864-761-44833	US-09-894-998-40	US-09-771-161A-97	US-09-815-242-12762	-242-1221
Sequence 2, Appli	Sequence 731, App		Sequence 400, App	Sequence 158, App	Sequence 5, Appli	Sequence 18, Appl	Sequence 115, App	Sequence 354, App	Sequence 8, Appli	Sequence 309, App	Sequence 13171, A	Sequence 188, App	-	-	Sequence 39, Appl	7	Sequence 6, Appli	Sequence 8, Appli	Sequence 1616, Ap	Sequence 761, App	Sequence 44833, A	Sequence 40, Appl	Sequence 97, Appl	Sequence 12762, A	•

ALIGNMENTS

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APPLICANT: Xu, H. Howard

TITLE OF INVENTION: Identification of Essential Genes in

TITLE OF INVENTION: Prokaryotes

FILE REFERENCE: ELITRA.011A

CURRENT APPLICATION NUMBER: US/09/815,242

CURRENT APPLICATION NUMBER: 60/191,078

PRIOR APPLICATION NUMBER: 60/191,078

PRIOR APPLICATION NUMBER: 60/206,848

PRIOR FILING DATE: 2000-03-21

PRIOR APPLICATION NUMBER: 60/207,727

PRIOR APPLICATION NUMBER: 60/207,727

PRIOR APPLICATION NUMBER: 60/207,727

PRIOR APPLICATION NUMBER: 60/242,578

PRIOR APPLICATION NUMBER: 60/242,578

PRIOR APPLICATION NUMBER: 60/257,931

PRIOR APPLICATION NUMBER: 60/257,931

PRIOR APPLICATION NUMBER: 60/257,931

PRIOR APPLICATION NUMBER: 60/257,931

PRIOR APPLICATION NUMBER: 60/257,931
                                                                       ; ORGANISM: Enterococcus faecalis US-09-815-242-4973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-815-242-4973
                                                                                                                  NUMBER OF SEQ ID NOS: 14110
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4973
LENGTH: 585
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 4973, Application US/09815242 Patent No. US20020061569A1 GENERAL INFORMATION:
Query Match
Best Local Similarity
                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/269,308 PRIOR FILING DATE: 2001-02-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
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Yamamoto, Robert T.
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Zyskind, Judith W.
Wall, Daniel
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93.1%;
83.3%;
Score 27; DB 10;
Pred. No. 1.1e+02;
                      Length 585;
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PRIOR FILING DATE: 2000-03-21
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/200,848
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR FILING DATE: 2000-10-23
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR APPLICATION NUMBER: 60/259,308
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-10-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         75-09-815-242-10580
                                                                                                                                                                                                        Sequence 9, Application US/09966147
Patent No. US20020146416A1
GENERAL INFORMATION:
APPLICANT: Presta, Leonard G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 10580
LENGTH: 586
                                                                                                                                                                                                                                                                                    -09-966-147-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Enterococcus faecalis -09-815-242-10580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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Patent No. US20020061569A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Identification of Essential Genes
TITLE OF INVENTION: Prokaryotes
FILE REFERENCE: ELITRA.011A
CURRENT APPLICATION NUMBER: US/09/815,242
CURRENT FILING DATE: 2001-03-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NPPLICANT: Haselbeck, Robert
                                                                                                                                                                                                                                                                                                                                                                  103 EIRDIR 108
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                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
nes 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                       1 EIRDLR 6
                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                TITLE OF INVENTION: HUMAN trk RECEPTORS AND NEUROTROPHIC FACTOR INHIBITORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EIRDLR 6
                                  ADDRESSEE: Knobbe, Martens, Olson & Bear, LLP STREET: 620 Newport Center Drive, 16th Floor CITY: Newport Beach STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Carr, Grant J.
Yamamoto, Robert T.
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Zyskind, Judith W.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wall, Daniel
                                                                                                                                  OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          H. Howard
                                                                                                                                                                                        Shelton,
                                                                                                                                                                        Roman
                                                                                                                                                                                      David L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 27;
Pred. No.
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                                                                                                                                                                                                      ; NUMBER OF SEQ ID NOS: 11
; SEQ ID NO 3
; LENGTH: 814
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-924-859A-3
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RESULT 5
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                                                                                                                        Query Match
Best Local Similarity
Matches 5; Conserv
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 3, Application US/09924859A Patent No. US20020137113A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Godowski, Paul J.
APPLICANT: Mark, Melanie R.
APPLICANT: Sadick, Michael D.
APPLICANT: Shelton, David L.
APPLICANT: Wong, Wai Lee Tan
TITLE OF INVENTION: KINASE RECEPTOR ACTIVATION ASSAY
FILE REFERENCE: P0854C1P2C1
                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/924,859A CURRENT FILING DATE: 2001-08-08 PRIOR APPLICATION NUMBER: US/09/417,381 PRIOR FILING DATE: 1999-10-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (415) 954-4
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
                                                      107 ELRDLR 112
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83 ELRDLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 05/286846
FILING DATE: 05-AUG-1994
APPLICATION NUMBER: 08/215139
FILING DATE: 18 MAR-1994
ATTORNEY/AGENT INFORMATION:
NAME: Dreger, Ginger
REGISTRATION NUMBER: 33,055
REFERENCE/DOCKET NUMBER: GENENT.33CPC4C
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity es 5; Conserv
                                                                                          1 EIRDLR 6
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FILING DATE: 27-Sep-2000
CLASSIFICATION: CUNKNOWN>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARRE: WINDRATIN (Genentech) CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: Amino Acid
TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: (415)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 790 amino acids
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                                                                                                                                Conservative
                                                                                                                                              93.1%;
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                                                                                                                            Score 27; DB Pred. No. 1.6e 1; Mismatches
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Pred. No.
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1.5e+02;
                                                                                                                                                DB 10; Length 814;
1.6e+02;
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                                                                                                                                                                                            US-09-815-242-5292
                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Escherichia coli
US-09-741-669-345
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ) ORGANISM: Homo sapiens
US-09-764-878-151
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Best Local S
Matches 5
                                                                                                                                           Sequence 5292, Application US/09815242 Patent No. US20020061569A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 481
SOFWARE: FRSESEQ for Windows Version 4.0
SEQ ID NO 345
LENGTH: 325
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent No. US200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies FILE REFERENCE: PA121 CURRENT APPLICATION NUMBER: US/09/764,878 CURRENT FILING DATE: 2001-01-17 Prior application data removed - consult PALM or file wrapper NUMBER OF SEQ ID NOS: 428 SOFTWARE: Patentin Ver. 2.0 LENGTH: 87 TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 151,
                                                                                                           APPLICANT: Haselbeck, Robert APPLICANT: Ohlsen, Kari L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILE REFERENCE: ELITRA.009A
CURRENT APPLICATION NUMBER: US/09/741,669
CURRENT FILING DATE: 2000-12-19
                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Rosen et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PPLICANT: Zyskind, Judith W.

TILE OF INVENTION: Genes identified as required for INVENTION: proliferation of E. coli
                                                                                                                                                                                                                                                            216 EIRDVR 221
                                                                                                                                                                                                                                                                                                                        Local Similarity
les 5; Conserv
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Local Similarity 83.3%;
les 5; Conservative
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             Ohlsen, Karl L.
Zyskind, Judith W.
Wall, Daniel
Trawick, John D.
Carr, Grant J.
Yamamoto, Robert T.
Xu, H. Howard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Forsyth, R. Allyn
Ohlsen, Kari L.
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Identification of Essential Genes in
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                                                                                                                                                                                                                                                                                                                                         89.7%;
83.3%;
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                                                                                                                                                                                                                                                                                                                                         Score 26;
Pred. No.
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Pred. No.
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Query Match
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; OTHER INFORMATION: Xaa -
US-09-815-242-5292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-815-242-12503
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SEQ ID NO 5292
LENGTH: 501
                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Identification of Essential Genes
TITLE OF INVENTION: Prokaryotes
FILE REFERENCE: ELITRA.011A
CURRENT APPLICATION NUMBER: US/09/815,242
CURRENT FILING DATE: 2001-03-21
                                                                                                                                                                     PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
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PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
                                                                                                                                                                                                                                                                                                        CURRENT FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
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                                                                                                       PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/206,848 PRIOR FILING DATE: 2000-05-23
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CURRENT EILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
                                                              PRIOR APPLICATION NUMBER: 60/269,308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
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NAME/KEY: VARIANT
LOCATION: (1)...(
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RIOR FILING DATE: 2000-11-27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    134 DIRDLR 139
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Zyskind, Judith W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Carr, Grant
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Windows Version 4.0
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Pred. No. 1.5e+02;
1; Mismatches 0;
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APPLICANT: Travis, James

APPLICANT: Travis, James

APPLICANT: Banbula, Agnieszka

APPLICANT: Banbula, Agnieszka

FILE REFERENCE: 235.00440101

CURRENT APPLICATION NUMBER: US/10/008,355

CURRENT FILING DATE: 2001-11-08

PRIOR APPLICATION NUMBER: US 60/246,827

PRIOR FILING DATE: 2000-11-08

ONGANISM: Shewanella putrefaciens

US-10-008-355-5
TITLE OF INVENTION: Identification of Essential Genes in TITLE OF INVENTION: Prokaryotes FILE REFERENCE: ELITRA.011A
CURRENT APPLICATION UNMBER: US/09/815,242
CURRENT FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR FILING DATE: 2000-03-21
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR APPLICATION NUMBER: 60/242,578
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US-10-008-355-5
; Sequence 5, Application US/10008355
; Patent No. US20020164759A1
; GENERAL INFORMATION:
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Best Local S
Matches 5
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Patent No. US20020061569A1
GENERAL INFORMATION:
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LENGTH: 504
TYPE: PRT
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APPLICANT: Ohlsen, Kari L.
APPLICANT: Zyskind, Judith V
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les 5; Conserv
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Xu, H. Howard
                                                                                                                                                                                                                                                                                                                       Carr, Grant J.
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                                                                                                                                                                                                                                                                                                                                                Trawick, John D.
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Pred. No.
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Pred. No. 1.5e+02;
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APPLICANT: Number: Description of the Same
FILLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FITLE OF INVENTION: Acids Encoding the Same
FILE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/905,291A
CURRENT APPLICATION NUMBER: US/09/905,291A
CURRENT PILLING DATE: 2001-07-12
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILLING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR FILLING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR FILLING DATE: 1999-09-09-09
PRIOR FILLING DATE: 1999-09-09
PRIOR FILLING DATE: 1999-09-09
PRIOR FILLING DATE: 1999-09-09
PRIOR FILLING DATE: 1999-09-09
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILLING DATE: 1999-09-09
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR APPLICATION NUMBER: PCT/US99/21090
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SOFTWARE: FASTSEQ for Windows Version
SEQ ID NO 5164
LENGTH: 177
TYPE: PRT
ORGANISM: Pseudomonas aeruginosa
US-09-815-242-5164
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Stewart, Timothy A.
Tumas, Daniel
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Grimaldi, Christopher J.
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Mather, Jennie P.
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Hillan, Kenneth, J.
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Filvaroff, Ellen
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Eaton, Dan L.
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Pred. No. 83;
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APPLICATION NUMBER: PCT/US99/23089

1999-10-05

us-09-909-320-213

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NUMBER OF SEQ ID NOS: 423
SEQ ID NO 213
LENGTH: 360
TYPE: PRT
ORGANISM: Homo sapiens
US-09-905-291A-213
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                                                                                                                        ; NAME/KEY: SITE ; LOCATION: (83)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids ; NAME/KEY: SITE ; LOCATION: (360)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids US-09-925-299-861
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Best Local Similarity
5; Conserva
                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 1556
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 861
LENCTH: 360
TYPE: PRT
                                                             Matches
                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sequence 861, Application US/09925299 atent No. US20020055627A1 INFORMATION:
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equence 861, A
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CURRENT FILING DATE: 2001-08-10
                                                                                                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE: PA102
                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Rosen et al.
                                                                                                                                                                                                                                                                                                                                              RIOR APPLICATION NUMBER: 60/124,270 RIOR FILING DATE: 1999-03-12
                                                                                                                                                                                                                                                                                                                                                                           RIOR FILING DATE: 2000-03-08
                                                                                                                                                                                                                                    ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      132 EIQDLR 137
105 EVRDVR 110
                                                            Local Similarity tes 4; Conserv
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                              1 EIRDLR 6
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PILING DATE: 1999-12-02
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LING DATE: 1999-12-20
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                                                             Conservative
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                                                                         86.2%;
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Pred. No.
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Pred. No.
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RESULT 13

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SEQ ID NO 213
LENGTH: 360
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IIILE OF INVENTION: Acids Encoding the Same
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: PCT/US99/20594 FILING DATE: 1999-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 60/145,698 FILING DATE: 1999-07-26
                                                                                                APPLICATION NUMBER: PCT/US00/00219 FILING DATE: 2000-01-05
                                                                                                                                                                          APPLICATION NUMBER: PCT/US99/30911 FILING DATE: 1999-12-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: PCT/US99/20944
                                                                                                                                                                                                                    APPLICATION NUMBER: PCT/US99/30095 FILING DATE: 1999-12-16
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                                                                                                                                                                                                                                                                                                              ICATION NUMBER: PCT/US99/28564
                                                                                                                                                          CATION NUMBER: PCT/US99/30999
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                                                                                                                                                                                                                                                                                                                                                                                                                                        CATION NUMBER: PCT/US99/23089
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tumas, Daniel
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Stewart, Timothy A.
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Grimaldi, Christopher J.
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Gerritsen, Mary E
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Eaton, Dan L.
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Botstein, David
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20020132240A1
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                                                                                                                                                                                                                                                                                                                                       DATE: 1999-11-30
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illan, Kenneth, J.
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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: 10466-14

FILE REFERENCE: 10466-14

CURRENT APPLICATION NUMBER: US/09/909,088B

CURRENT FILING DATE: 2001-07-18

PRIOR APPLICATION NUMBER: PCT/US00/04414

PRIOR FILING DATE: 1999-07-26

PRIOR APPLICATION NUMBER: US 60/143,048

PRIOR FILING DATE: 1999-07-26

PRIOR FILING DATE: 1999-07-26

PRIOR APPLICATION NUMBER: US 60/146,222

PRIOR APPLICATION NUMBER: US 60/146,222

PRIOR FILING DATE: 1999-07-28

PRIOR APPLICATION NUMBER: PCT/US99/20594

PRIOR APPLICATION NUMBER: PCT/US99/20594

PRIOR APPLICATION NUMBER: PCT/US99/20944

PRIOR APPLICATION NUMBER: PCT/US99/20944
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                                                         PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/28313
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PRIOR APPLICATION NUMBER: PCT/US99/28564
PRIOR FILING DATE: 1999-12-02
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                 APPLICATION NUMBER: PCT/US99/28565 FILING DATE: 1999-12-02
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Hillan, Kenneth, J.
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Grimaldi, Christopher J.
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Sequence 28, Application US/10052586
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                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/063486
PRIOR FILING DATE: 1997-10-21
PRIOR APPLICATION NUMBER: 60/063540
PRIOR FILING DATE: 1997-10-28
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PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/06250
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CURRENT FILING DATE: 2002-01-15
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FILING DATE: 1997-10-29
APPLICATION NUMBER: 60/063870
FILING DATE: 1997-10-31
                   APPLICATION NUMBER: 60/064103
FILING DATE: 1997-10-31
APPLICATION NUMBER: 60/065311
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Gurney, Austin L.
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Wood, William I.
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; PRIOR FILING DATE: 1998-06-17; PRIOR APPLICATION NUMBER: 60/089598; PRIOR APPLICATION NUMBER: 60/089598; PRIOR APPLICATION NUMBER: 60/089653; PRIOR APPLICATION NUMBER: 60/089908

Query Match 86.2%; Score 25; DB 12; Length 360; Best Local Similarity 83.3%; Pred. No. 1.8e+02; Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0; Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0; DB 132 EIGDLR 137

Search completed: November 13, 2002, 13:40:19

Job time: 4.22796 secs
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Result
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Listing first 45 summaries
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  US-09-791-537-21750

US-09-791-537-62039

US-09-791-537-92908

US-09-791-537-125497

US-10-205-331-57

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Sequence 21750, A
Sequence 62039, A
Sequence 92908, A
Sequence 125497,
Sequence 57, Appl
Sequence 3132, Ap
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30642, A	873,	4, App	20, Ap	3333,	764	289, A	08644,	690	07216,	879, A	98	9772,	7644,	475	5820,	3086,	9066,	687, A	9828	8508	61. Ac	5202	5204	5204	506 A	200	, ,	2872,	379	85, Ap	863	4465,	254	6802,	690	447

ALIGNMENTS

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APPLICANT: Blonomix, Inc.

APPLICANT: Debe, Derek

APPLICANT: Debe, Derek

APPLICANT: Debe, Derek

TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME

TITLE OF INVENTION: METHODS OF USE THEREOF

FILE REFERENCE: 21/210

CURRENT APPLICATION NUMBER: US/09/791,537

CURRENT FILING DATE: 2001-02-22

NUMBER OF SEQ ID NOS: 153055

SOFTWARE: Patentin version 3.0

SEQ ID NO 21750

LENGTH: 122

TYPE: PRT

ORGANISM: Mus musculus

US-09-791-537-21750
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Best Local Similarity
Matches 6; Conserva
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                                                                          Conservative
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                                                                       100.0%; Score 29; DB 21; 100.0%; Pred. No. 3.7e+02; tive 0; Mismatches 0;
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: Sequence 125497, Application US/09791537; GENERAL INFORMATION:
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US-09-791-537-92908
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CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: PAtentin version 3.0
SEQ ID NO 62039
LENGTH: 426
TYPE: PRT
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SEQ ID NO 92908
LENGTH: 542
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APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
CURRENT APPLICATION UMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEO ID NOS: 153055
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TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBI
TITLE OF INVENTION: METHODS OF USE THEREOF
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TILE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBI
TILE OF INVENTION: METHODS OF USE THEREOF
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; ORGANISM: Rattus norvegicus US-09-791-537-125497
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Best Local Similarity
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SOFTWARE: PATENTIN VET. 2
SEQ ID NO 57
LENGTH: 542
TYPE: PRT
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CURRENT FILING DATE: 2002-07-24
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Dixon, Alistair APPLICANT: Brooksbank, Robe
                             CURRENT APPLICATION NUMBER: US/09/611,526
CURRENT FILING DATE: 2000-07-07
PRIOR APPLICATION NUMBER: JP 1999-194486
PRIOR FILING DATE: 1999-07-08
                                                                                           TITLE OF INVENTION: PRIMERS FOR SYNTHESIS OF TITLE OF INVENTION: AND THEIR USES FILE REFERENCE: 08335/0122
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142 EIRDLR 147
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APPLICATION NUMBER: JP 2000-118774 FILING DATE: 2000-01-11
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                                                                                                                                                KOJIMA, SHINICHI
OTSUKI, TETSUJI
KOGA, HISASHI
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SUGIYAMA, TOMOYASU
NAGAI, KEIICHI
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KAWAI, YURI
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nilarity 100.0%;
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HAYASHI, KOJI
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US-09-611-526-3132
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                                                                                                                             CURRENT FILING DATE: 2001-02-2
NUMBER OF SEQ ID NOS: 153055
SOPTWARE: PatentIn version 3.0
SEQ ID NO 56903
LENGTH: 543
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NUMBER OF SEQ ID NOS: 153055
SOFTWARE: Patentin version 3.0
SEQ ID NO 34475
LENGTH: 543
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                                                                                        ORGANISM: Mus musculus -09-791-537-56903
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ITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMB
ITLE OF INVENTION: METHODS OF USE THEREOF
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LE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMB
LE OF INVENTION: METHODS OF USE THEREOF
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RESULT 11
US-09-791-537-94465
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US-09-791-537-125495
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LENGTH: 548
TYPE: PRT
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APPLICANT: Danzer, JOSEPh
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
FILE REFERENCE: 261/210
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APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
FILE REFERENCE: 261/210
                                     APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME
TITLE OF INVENTION: METHODS OF USE THEREOF
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CURRENT FILING DATE: 2001-02-22
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CURRENT APPLICATION NUMBER: US/09/791,537
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| 142 EIRDLR 147
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Pred. No. 2.3e+03;
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; LENGTH: 568
; TYPE: PRT
; ORGANISM: HUMAN
US-60-243-468-985
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US-09-791-537-18635
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US-09-791-537-18635
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Sequence 985 Applicat:
GENERAL INFORMATION:
APPLICANT: Beasley,
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
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US-09-791-537-94465
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Best Local
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SOFTWARE: FastSEQ fo
SEQ ID NO 985
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TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/60/243,468
CURRENT FILING DATE: 2000-10-27
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411 EIRDLR 416
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ID NOS: 153055
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                                                                                                                                                                                                                                                                              ISOLATED HUMAN DRUG TARGET PROTEINS,
NUCLEIC ACID MOLECULES ENCODING HUMAN DRUG TARGET PROTEINS,
AND USES THEREOF
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Pred. No.
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Pred. No. 2.4e+03;
; Mismatches 0;
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Pred. No. 2.3e+03;
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SEQ ID NO 22872
LENGTH: 1161
TYPE: PRT
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GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
                                                                                   Query Match
Best Local
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SEQ ID NO 2379
LENGTH: 764
TYPE: PRT
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CURRENT FILING DATE: 2002-03-25
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TITLE OF INVENTION: NOVEL full length cDNA
FILE REFERENCE: H1-A0105
                                                                                                                                                                                                                                                                                                                                                  APPLICANT: MARC J. Rubenfield et al.
EITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID
EITLE OF INVENTION: ARBUGINOSA FOR DIAGNOSTICS A
FILE REFERENCE: 107196.136
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428 EIRDLR 433
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Pred. No. 3.5e+03;
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Listing first 45 summaries
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1: /cgn2_6/ptodatta/1/paa/PCT_NEW_COMB.pep:*

2: /cgn2_6/ptodatta/1/paa/US06_NEW_COMB.pep:*

3: /cgn2_6/ptodatta/1/paa/US07_NEW_COMB.pep:*

4: /cgn2_6/ptodatta/1/paa/US09_NEW_COMB.pep:*

5: /cgn2_6/ptodatta/1/paa/US09_NEW_COMB.pep:*

6: /cgn2_6/ptodatta/1/paa/US09_NEW_COMB.pep:*

7: /cgn2_6/ptodatta/1/paa/US09_NEW_COMB.pep:*
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29.431 Million cell updates/sec
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US-10-274-694-2
US-10-027411A-5004
US-10-145-087A-309
US-10-145-092A-309
US-10-165-038A-309
US-10-165-038A-309
US-10-172-039A-309
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US-10-125-923A-28

US-10-240-851-95

US-10-092-411A-3279

PCT-US02-31996-16

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PCT-US02-31996-12

PCT-US02-32851-4
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sequence 6, Appli
sequence 28, Appli
sequence 28, Appli
sequence 35, Appl
sequence 3579, Ap
sequence 16, Appl
sequence 16, Appl
sequence 17, Appl
sequence 14, Appl
sequence 5004, Ap
sequence 5004, Ap
sequence 309, App
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ALIGNMENTS

RESULT 1 US-09-85-086-6 Sequence 6, Application US/09856086 Sequence 6, Application US/09856086 Sequence 6, Application US/09856086 GENERAL INFORMATION: DIAGNOSIS OF DEMYELINATING OR SPONGIFORM DISEASE FILE REFERENCE: 78104.040 CURRENT APPLICATION NUMBER: US/09/856,086 CURRENT FILING DATE: 2001-07-30 NUMBER OF SEQ ID NOS: 7 SOFTWARE: Patentin version 3.1 SEQ ID NO 6 LENGTH: 6 TYPE: PRT ORGANISM: Homo sapiens, Bos US-09-856-086-6 US-09-856-086-6 OUETY Match Best Local Similarity 100.0%; Score 29; DB 5; Length 6; Best Local Similarity 100.0%; Pred. No. 3.8e+04; Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0; IIIII

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	Que Bes	GENERAL INFORMATION: APPLICANT: EBRINGER, ALAN TITLE OF THE PRETERENCE: 78104.040 CURRENT APPLICATION NUMBER: CURRENT ELING DATE: 2001-0 NUMBER OF SEQ ID NOS: 7 SOFTWARE: Patentin version 3 SEQ ID NO 7 LENGTH: 8 TYPE: PAT ORGANISM: Homo sapiens, Bos US-09-856-086-7	Qy 1 EIRDL Db 1 EIRDL RESULT 2 RESULT 2 RESULT 7 A
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	100 llarity 100 Conservative	ENERAL INFORMATION: APPLICANT: EBRINGER, ALAN TITLE OF INVENTION: DIAGNOSIS FILE REFERENCE: 78104.040 CURRENT APPLICATION NUMBER: US CURRENT FILLING DATE: 2001-07- NUMBER OF SEQ ID NOS: 7 SOFTWARE: Patentin version 3:1 EQ ID NO 7 LENGTH: B TYPE: PRI ORGANISM: Homo sapiens, Bos 09-856-086-7	ā ⊒
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	9, %	GENERAL INFORMATION: APPLICANT: EBRINGER, ALAN TITLE OF INVENTION: DIAGNOSIS OF D FILE REFERENCE: 78104.040 CURRENT APPLICATION NUMBER: US/09/ CURRENT FILING DATE: 2001-07-30 NUMBER OF SEQ ID NOS: 7 SOFFWARE: Patentin version 3.1 SEQ ID NO 7 LENGTH: B TYPE: PRT ORGANISM: Homo sapiens, Bos 1-09-856-086-7	
	Score 29; DB Pred. No. 3.8 0; Mismatches	ENERAL INFORMATION: APPLICANT: EBRINGER, ALAN TITLE OF INVENTION: DIAGNOSIS OF DEWYELIN FILE REFERENCE: 78104.040 CURRENT APPLICATION NUMBER: US/09/856,086 CURRENT ETLING DATE: 2001-07-30 NUMBER OF SEQ ID NOS: 7 SOFTWARE: Patentin version 3.1 EQ ID NO 7 LENGTH: 8 TYPE: PRT ORGANISM: Homo sapiens, Bos 09-856-086-7	
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	0,	ENERAL INFORMATION: APPLICANT: EBRINGER, ALAN APPLICANT: EBRINGER, ALAN TITLE OF INVENTION: DIGNOSIS OF DEMYELINATING OR SPONGIFORM DISEASE FILE REFERENCE: 78104.040 CURRENT APPLICATION NUMBER: US/09/856,086 CURRENT FILING DATE: 2001-07-30 NUMBER OF SEQ ID NOS: 7 SOFTWARE: Patentin version 3.1 EQ ID NO 7 LENGTH: B TYPE: PAT ORGANISM: Homo sapiens, Bos 09-856-086-7	
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US-10-240-851-95

Sequence 95, Application US/10240851

GENERAL INFORMATION:

APPLICANT: John P. Carulli et al.

TITLE OF INVENTION: THE HIGH BONE MASS GENE OF 11q13.3

FILE REFERENCE: 032796-021

CURRENT APPLICATION NUMBER: US/10/240,851

CURRENT FILING DATE: 2002-10-04

PRIOR APPLICATION NUMBER: US 09/544,398

PRIOR FILING DATE: 2000-04.05
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Best Local Similarity
"arches 5; Conserve
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PRIOR FILING DATE: 1997-10-28
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PRIOR APPLICATION NUMBER: 60/059263
PRIOR FILING DATE: 1997-09-18
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PRIOR APPLICATION NUMBER: 10/052586
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RIOR APPLICATION NUMBER: 60/059266
RIOR FILING DATE: 1997-09-18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ENGTH: 360
                                                                                                                                                                                                                                                                                                                                 132 EIQDLR 137
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                  FILING DATE: 2000-04-05
APPLICATION NUMBER: US 09/543,771
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FILING DATE:
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FILING DATE: 1997-10-28
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Godowski, Paul J.
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                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 25;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 360;
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US-10-092-411A-3279
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Sequence 16, Application PC/TUS0231996
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 5676
SEQ ID NO 3279
LENGTH: 78
SOFTWARE: PatentIn version 3.1
SEQ ID NO 16
LENGTH: 116
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Best Local Similarity
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LENGTH: 11:
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                                                                                                                FILE REFERENCE: 3318-WO CURRENT APPLICATION NUMBER: PCT/US02/31996 CURRENT FILING DATE: 2002-10-04
                                                                            PRIOR APPLICATION NUMBER: US 60/328,026 PRIOR FILING DATE: 2001-10-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/092,411A CURRENT FILING DATE: 2002-03-07 PRIOR APPLICATION NUMBER: US 09/134,001 PRIOR FILING DATE: 1998-08-13
                                                          PRIOR FILING DATE: 2001-10-09
NUMBER OF SEQ ID NOS: 26
                                                                                                                                                                      APPLICANT: IMMUNEX CORPORATION
APPLICANT: Butz, Eric A.
APPLICANT: Anderson, Dirk M.
TITLE OF INVENTION: MAMMALIAN C-TYPE LECTINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 60/055,779 PRIOR FILING DATE: 1997-08-14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Lynn Doucette-Stamm et al TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOX TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS FILE REFERENCE: 032796-101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US 60/071,449
PRIOR FILING DATE: 1998-01-13
PRIOR APPLICATION NUMBER: US 60/105,511
PRIOR FILING DATE: 1998-10-23
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mes 4; Conserv
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66.7%;
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Pred. No.
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Pred. No.
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2.7e+02;
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22;
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ORGANISM: Mus sp.

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PRIOR APPLICATION NUMBER: US 09/134,001
PRIOR FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR FILING DATE: 1997-11-08
PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR FILING DATE: 1997-08-14
NUMBER OF SEQ ID NOS: 5676
SEQ ID NO 5232
PRIOR HILING DATE: 1997-08-14
NUMBER OF SEQ ID NOS: 5676
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Best Local Similarity
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Best Local Similarity
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                                                                                                                           PCT-US02-31996-12
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SOFTWARE: PatentIn version 3.1
SEQ ID NO 12
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Best Local Similarity
Matches 5; Conserv
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CURRENT APPLICATION NUMBER: US/10/092,411A
CURRENT FILING DATE: 2002-03-07
                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: PCT/US02/31996
CURRENT FILING DATE: 2002-10-04
PRIOR APPLICATION NUMBER: US 60/328,026
PRIOR FILING DATE: 2001-10-09
                                                                                                                                                                                                                                                                                                  APPLICANT: Anderson, Dirk M.
TITLE OF INVENTION: MAMMALIAN C-TYPE LECTINS
FILE REFERENCE: 3318-WO
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TYPE: PRT
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                                                                                                                                                       LENGTH: 236
TYPE: PRT
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 34
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                             2 IRDLR 6
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IRDLR 38
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                                                            Conservative
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100.0%; Pred. No.
tive 0; Mismatc
                                                                          82.8%; Score 24;
100.0%; Pred. No.
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100.0%; Pred. No.
Live 0; Mismatcl
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; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No: 7502092CD1
PCT-US02-32851-4
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Query Match
Best Local Similarity
Matches 5; Conserv
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                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 60/346,308
PRIOR FILING DATE: 2001-11-09
PRIOR APPLICATION NUMBER: US 60/332,385
PRIOR FILING DATE: 2001-11-16
                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 60/360,681
PRIOR FILING DATE: 2001-10-19
PRIOR APPLICATION NUMBER: US 60/343,896
PRIOR FILING DATE: 2001-11-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US 60/328,931 PRIOR FILING DATE: 2001-10-12
                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 102
                                                                                                                                                                                                                                          PRIOR FILING DATE:
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                                                                                                                                                         LENGTH: 282
TYPE: PRT
                                                                                                                                         ORGANISM: Homo sapiens
                                                                                                                         FEATURE:
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URRENT APPLICATION NUMBER: PCT/US02/32851
                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 60/347,703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        YANG,
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CHANG, Hsin-Ru
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WARREN, Bridget A.
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LEE, Sally
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KHARE, Reena
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 Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Henry
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                82.8%;
83.3%;
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Matches 4; Conserv
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SEQ ID NO 149
LENGTH: 319
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CURRENT APPLICATION NUMBER: US/10/264,213
CURRENT FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 253
SOFTWARE: FRANCESON FOR THE STATES SOFTWARE SOFTWA
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APPLICANT: YAO, MONÍQUE G.
APPLICANT: YUE, HENRY
TITLE OF INVENTION: DRUG METABOLIZING ENZYMES
FILE REFERENCE: PI-0151 USA
CURRENT APPLICATION NUMBER: US/10/274,694
CURRENT FILING DATE: 2002-10-18
PRIOR APPLICATION NUMBER: 60/221,837
PRIOR FILING DATE: 2000-07-28
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APPLICANT: Lubbers, Mark William
APPLICANT: Dekker, James
TITLE OF INVENTION: Polynucleotides, materials incorporating
TITLE OF INVENTION: them, and methods for using them.
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GANDHI, Ameena R.
HAFALIA, April J.A.
KEARNEY, Liam
                                                                                                                                                                                                                                                                                                                                                                                            THANGAVELU, Kavitha
THORNTON, Michael B.
TRIBOULEY, Catherine M.
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SANJANWALA, Madhusudan
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PATTERSON, Chandra S.
RAMKUMAR, Jayalaxmi
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                                                                                                                                                                                                                                                                                                                                                              WALIA, Narinder K.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KHAN, Farrah A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dyung Aina M.
                                                                                                                                                                                                                                                                                                                                Yuming
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                                                                                                                                                                                                                                                                                          Junming
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Christopher M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score
Pred.
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1.1e+02;
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Best Local Similarity
Tatches 5; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/092,411A
CURRENT FILING DATE: 2002-03-07
PRIOR APPLICATION NUMBER: US 09/134,001
PRIOR FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR FILING DATE: 1997-11-08
PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR FILING DATE: 1997-08-14
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                                                                                                                                          Sequence 309, Application US/10145087A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 5676
SEQ ID NO 5004
LENGTH: 344
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 5004, Application US/10092411A
GENERAL INFORMATION:
APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCO:
TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 032796-101
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Best Local :
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SOFTWARE: PERL Program
SEQ ID NO 2
LENGTH: 332
                                                                                      APPLICANT:
                     APPLICANT:
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                                                       APPLICANT:
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   APPLICANT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/218,948
PRIOR FILING DATE: 2000-07-14
PRIOR APPLICATION NUMBER: US01/21324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 2000-07
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OTHER INFORMATION: Incyte ID No: 7477262CD1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
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                                                                                                                                                                                                                                                17 IRDLR 21
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nes 4; Conserv
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                                                                Baker Kevin P.
Botstein, David
Desnoyers, Luc
                                                                                                                       Ashkenazi, Avi
Fong,
                Filvaroff, Ellen
                                                    Eaton, Dan
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   Sherman
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Pred. No.
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PPLICANT:

Wei-Qiang

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; Remaining Prior Applicat;
; NUMBER OF SEQ ID NOS: 624
; SEQ ID NO 309
; LENGTH: 406
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-145-087A-309
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Best Local Similarity
Thes 5; Conservat
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                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                Sequence 309, Application US/10143031A
                                                                                                                            APPLICANT:
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PRIOR APPLICATION NUMBER: 60
PRIOR FILING DATE: 1998-03-1
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PRIOR FILING DATE: 1998-03-12
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PRIOR FILING DATE: 1998-03-11
                                                                                          APPLICANT:
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IPPLICANT: Wood, William I.
ITLE OF INVENITION: Secreted and Transmembrane Polypeptides and Nucleic
ITLE OF INVENITION: Acids Encoding the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ILE REFERENCE: P2630P1C47
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                                                                                                                                                                                                                                                                                                          1 EIRDL 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                 Ashkenazi, Avi
Baker Kevin P.
Botstein, David
Desnoyers, Luc
Eaton, Dan
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Shelton, David L.
Stewart, Timothy A.
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Hillan, Kenneth J
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Grimaldi, J. Christopher
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Gerritsen, Mary E.
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                              Ferrara, Napoleon
Filvaroff, Ellen
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Fong, Sherman
Gao, Wei-Qiang
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100.0%; Pred. No.
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RESULT 15
US-10-145-092A-309
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PRIOR FILING DATE: 2001-07-30
PRIOR PRIOR DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR PRIOR DATE: 1997-11-31
PRIOR PRIOR DATE: 1997-11-31
PRIOR PRIOR DATE: 1997-11-31
PRIOR PRIOR DATE: 1997-11-31
PRIOR APPLICATION NUMBER: 60/06364
PRIOR PILING DATE: 1997-11-21
PRIOR PRIOR DATE: 1997-11-21
PRIOR PRIOR DATE: 1998-03-10
PRIOR PRIOR DATE: 1998-03-10
PRIOR PRIOR DATE: 1998-03-11
PRIOR PRIOR DATE: 1998-03-11
PRIOR PILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077641
PRIOR PILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077649
PRIOR APPLICATION NUMBER: 60/077649
                                                                                                                         Sequence 309, Application US/10145092A
GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
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SEQ ID NO 309
LENGTH: 406
TYPE: PRT
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Best Local :
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                                                                                                           APPLICANT:
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5; Conserv
Fong, Suca...
Gao, Wei-Qiang
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Gerritsen, Mary E.
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Williams, P. Mickey
Wood, William I.
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Shelton, David L.
Stewart, Timothy A.
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Hillan, Kenneth J
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Grimaldi, J. Christopher
                                          Ferrara, Napoleon Filvaroff, Ellen Fong, Sherman
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                                                                                                           Eaton, Dan
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                                                                                                                                                                                                                                                                                                                                                                                                                                             82.8%; Score 24; llarity 100.0%; Pred. No. Conservative 0; Mismatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application data removed - See File Wrapper or PALM
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PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077649
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077791
PRIOR APPLICATION NUMBER: 60/077791
PRIOR FILING DATE: 1998-03-12
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 624
SEQ ID NO 309
LENGTH: 406
TYPE: PRT
ORGANISM: Homo sapiens
US-10-145-092A-309
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Search completed: November 13, 2002, 13:39:40 Job time: 3.42553 secs
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Best Local Similarity luv.
Thes 5; Conservative
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CURRENT FILING DATE: 2002-10-10
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR FILING DATE: 1907-10-17
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/062249
PRIOR FILING DATE: 1997-11-3
PRIOR PRIOR FILING DATE: 1997-11-3
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PRIOR PRIOR DATE: 1997-11-3
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PPLICANT: Shelton, David L.
PPLICANT: Stewart, Timothy A.
PPLICANT: Tumas, Daniel
PPLICANT: Williams, P. Mickey
PPLICANT: Williams, P. Mickey
PPLICANT: WORDING, William I.
ITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
ITLE OF INVENTION: Acids Encoding the Same
IDER REFERENCE: P2630P1C45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RIOR APPLICATION NUMBER: 60/077632
                                                                                        146 EIRDL 150
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FILING DATE: 1998-03-10
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Gerritsen, Mary E.
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Hillan, Kenneth J
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J. Christopher
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100.0%; Pred. No.
tive 0; Mismatch
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GenCore version 5.1.3 Copyright (c) 1993 - 2002 Compugen Ltd

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and is derived by analysis of the total score distribution.
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hypothetical prote	probable lipoxygen	vacuolar protein-s	DNA gyrase, subuni	hypothetical prote	nerve growth facto	hypothetical prote	DNA polymerase III	DNA polymerase III	DNA polymerase III	DNA-directed DNA p	probable membrane	intermediate filam	gamma-glutamyl pho	conserved hypothet	unknown protein Fl

ALIGNMENTS

R;Fleischmann, R.D.; Adams, M.D.; White, O.; Clayton, R.A.; Kirkness, E.F.; Kerlavage; Gocayne, J.D.; Scott, J.; Shirley, R.; Liu, L.I.; Glodek, A.; Kelley, J.M.; Weldman, D.M.; Brandon, R.C.; Fine, L.D.; Fritchman, J.L.; Fuhrmann, J.L.; Geoghagen, N.S.M. Science 269, 496-512, 1995
A;Authors: Gnehm, C.L.; McDonald, L.A.; Small, K.V.; Fraser, C.M.; Smith, H.O.; Vente A;Title: Whole-genome random sequencing and assembly of Haemophilus influenzae Rd. A;Reference number: A64000; MUID:95350630; PMID:7542800
A;Accession: B64156

A;Status: nucleic acid sequence not shown; translation not shown A;Molecule type: DNA A;Residues: 1-183 <TIGR>

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pectate lyase - Erwinia carotovora
C;Species: Erwinia carotovora
C;Species: Erwinia carotovora
C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 08-Oct-1999
C;Accession: S44995
C;Accession: S44995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Cross-references: GB:U32748; GB:L42023; NID:g1573645; PIDN:AAC22315.1; PID:g1573655 A;Note: best homolog was a hypothetical protein from Escherichia coli C;Superfamily: Methanococcus jannaschii conserved hypothetical protein MJ0062
Ş
                                                                                                     A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-347 <HEI>
A;Cross-references: EMBL:X79232; NID:g488382; PIDN:CAA55814.1; PID:g488383
                                                                                                                                                                                                                  R;Heikinheimo, R.; Flego, D.; Pirhonen, M.; Karlsson, M.B.; Eriksson, A.; Mae, A.; Ko
submitted to the EMBL Data Library, May 1994
A;Description: Characterization of a novel pectate lyase from Erwinia carotovora subs
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                                                                                                                                                                                A; Reference number: S44995
A; Accession: S44995
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Pred. No. 69;
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protein kinase - Bacillus brevis
C;Species: Bacillus brevis
C;Cpate: 19-Jul-1996 #sequence_revision 19-Jul-1996 #text_change
C;Accession: 139834
R;Louw, M.E.; Reid, S.J.; James, M.D.; Watson, T.G.
Appl. Microbiol. Biotechnol. 42, 78-84, 1994
A;Title: Cloning and sequencing the degs degu gene operon from a A;Reference number: 139834; MUID:95169370; PMID:7765823
A;Accession: 139834
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A; Molecule type: DNA
A; Residues: 1-377 <STO>
A; Cross-references: GB: AP001519; GB: BA0000004; NID: g10176109; PIDN: BAB07348.1; GSPDB: GNOC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R;Takami, H.; Nakasone, K.; Takaki, Y.; Maeno, G.; Sasaki, R.; Masui, N.; Fuji, F.; Hir: Nucleic Acids Res. 28, 4317-4331, 2000
A;Title: Complete genome sequence of the alkaliphilic bacterium Bacillus halodurans and A;Reference number: A83650; MUID:20512582; PMID:11058132
A;Accession: E84103
                                                                                                                                                                                                                                                                                                               8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-362 <JON>
A;Cross-references: GB:M89471
C;Superfamily: fos/jun DNA-binding domain homology
F;52-92/Domain: fos/jun DNA-binding domain homology
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C:Species: Marek's disease virus
C:Date: 27-Jun-1994 #sequence_revision 27-Jun-1994 #text_change 01-Dec-1995
C:Accession: A44083
    A; Molecule
                 A; Status: preliminary; translated
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A;Title: Marek disease virus encodes a basic-leucine zipper gene A;Reference number: A44083; MUID:92237304; PMID:1315048
A;Accession: A44083
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type: DNA
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C;Genetics:
A;Gene: APE2096
C;Superfamily: c
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T51195
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A; Introns: 342/1
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A; Residues: 1-497 <SCH>
A; Cross-references: EMB
                                                                                                                                                                                                                                                                                                                                                                     hypothetical protein B7N4.20 [imported] - Neurospora crassa C;Species: Neurospora crassa C;Decies: Neurospora crassa C;Date: 28-Jul-2000 #sequence_revision 28-Jul-2000 #text_change 28-Jul-2000 C;Accession: T51195
                                                                                                                                                         A; Gene: NCSP:B7N4.20
A; Map position: 6
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A;Title: Complete genome sequence of an aerobic hyper-thermophilic A;Reference number: A72450; MUID:99310339; PMID:10382966
A;Accession: C72515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Species: Aeropyrum pernix
C;Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 20-Jun-2000
C;Accession: C72515
                                                                                                                                                                                                                                                                                 A; Status: preliminary
                                                                                                                                                                                                                                                                                                     A; Accession: T51195
                                                                                                                                                                                                                                                                                                                      A; Reference number: Z25286
                                                                                                                                                                                                                                                                                                                                 R;Schulte, U.; Aign, V.; Hoheisel, J.; Brandt, P.; Fartmann, B.; Holland, R.; submitted to the Protein Sequence Database, July 2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Experimental source:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R;Kawarabayasi, Y.; Hino, Y.; Horikawa, H.; Yamazaki, S.; Haikawa, Y.; Jin-no, K.; awa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Gene: degS
C;Superfamily: regulatory protein
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                                                                   Matches
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Best Local :
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                                                                 Local Similarity 100 les 6; Conservative
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hes 6; Conserv
                               1 EIRDLR 6
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EIRDLR
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Pred. No.
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A,Title: Cloning and developmental expression of the murine neurofilament gene family. A,Reference number: A43772
A,Recession: A43772
A,Recession: A43772
A,Recession: A43772
A,Residues: 1-5,'Y',7-8,'Y',10-64,'M',66-72,'L',74-98,'D',100-194,'R',196-202,204-239, A,Residues: 1-5,'Y',7-8,'Y',10-64,'M',66-72,'L',74-98,'D',100-194,'R',196-202,204-239, A,Residues: 1-5,'Y',7-8,'Y',10-64,'M',56-72,'L',74-98,'D',100-194,'R',196-202,204-239, A,Residues: 1-5,'Y',7-8,'Y',10-64,'M',56-72,'L',74-98,'D',100-194,'R',196-202,204-239, A,Residues: 1-5,'Y',7-8,'Y',10-64,'M',56-72,'L',74-98,'D',100-194,'R',196-202,204-239, A,Residues: 1-5,'Y',7-8,'Y',10-64,'M',56-72,'L',74-98,'D',100-194,'R',196-202,204-239, A,Residues: 1-5,'Y',7-8,'Y',10-64,'M',56-72,'L',74-98,'D',100-194,'R',196-202,204-239, A,Recession: A41012; MUID:92011653; PMID:1717455
A,Recession: A41012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        K; Nakanira, K.; Ikenaka, K.; Wada, K.; Tamura, T. J. Biol. Chem. 265, 19786-19791, 1990
A;Title: Structure of the 68-kDa neurofilament gene and A;Reference number: 155316; MUID:91060592; PMID:2246261 A;Accession: 155316
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                                                                                                                                                                                                                                                                                                       F;126-138/Region: linker 1
F;139-234/Domain: coil 1b, alpha-helical
F;235-256/Region: linker 12
                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Introns: 349/3; 391/2; 498/1
C; Superfamily: cytoskeletal keratin
C; Keywords: coiled coil; intermediate filament
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: DNA
A; Residues: 1-5,'Y',7-8,'Y',10-28 <RES>
A; Crooss-references: GB: M55423; NID: g200027;
C; Comment: This is the most abundant of the
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J. Cell Biol. 100, 843-850, 1985
A;Title: Genetics, evolution, and expression of the 68,000-mol-wt neurofilament
A;Reference number: A26562; MUID:85131334; PMID:3919033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references: GB:M13016; A;Note: the authors translated
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                                                                                                                                                                                                                                                    F;257-272/Domain: coil 2a, alpha-helical F;273-281/Region: linker 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: GB:X02165
A;Experimental source: brain
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A; Residues: 242-543 <LE2>
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A; Residues: 1-543 <LEW>
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;Date: 31-Mar-1988 #sequence_revision 30-Sep-1993 #text_change
;Accession: A25227; A26562; A43772; A41012; I55316
;Lewis, S.A.; Cowan, N.J.
                                                                                                                                                                                                  ;282-401/Domain: coil 2b, alpha-helical
;404-543/Domain: tail <TAI>
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                                                                          Query Match
Best Local
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EIRDLR
                                                                          Similarity
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tail
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three neurofilament
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A;Cross-references: EMBL:X05608; NID:g1495072; PIDN:CAA29097.1; A;Note: the authors translated the codon ATG for residue 366 as R;Pospelov, V.A.; Pospelova, T.V.; Julien, J.P. Cell Growth Differ. 5, 187-196, 1994
A;Title: AP-1 and Krox-24 transcription factors activate the neu A;Reference number: I52832; MUID:94235564; PMID:8180132
A;Accession: I52832
                                                                                                                                                                                            N; Alternate names: 68K neurofilament protein C; Species: Sus scrofa domestic a (domestic play C; Species: Sus scrofa domestic a (domestic play C; Date: 15-Nov-1984 #sequence_revision 28-May-1986 C; Accession: A91337; A90973; A34569; A02963 R; Gelsler, N.; Plessmann, U; Weber, K. FEBS Lett. 182, 475-478, 1985 FEBS Lett. 182, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-478, 475-47
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A;Accession: S07144
A;MOlecula + 1122
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R;Julien, J.P.; Grosveld, F.; Yazdanbaksh,
Biochim. Biophys. Acta 909, 10-20, 1987
A;Title: The structure of a human neurofile
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N;Contains: Glu-50 brain peptide
C;Species: Homo sapiens (man)
C;Date: 29-Jan-1993 #sequence_revision 29-Jan-1993 #text_change 21-Jul-2000
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QFPGL
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C;Superfamily: cytoskeletal keratin
C;Keywords: brain; colled coil; intermedia
F;469-544/Product: Glu-50 peptide #status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: protein
A; Molecule type: protein
A; Residues: 469-472, 'D', 474 <NOM>
A; Experimental source: Glu-50 brain peptide
A; Experimental source in is named for its
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Best Local Similarity
""" 6; Conserv
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J. Blochem. 93, 825-831, 1933
A;Title: Highly acidic proteins from human brain: purification
A;Reference number: A60703; MUID:83265667; PMID:6135695
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                         A; Molecule type: protein A; Residues: 1-547 <GE1> R; Geisler, N.; Kaufmann, EMBO J. 2, 1295-1302, 198
                                                                                                                                                                  A; Reference number: A; Accession: A91337
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A; Map position: 8p21-8p21
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A; Residues: 1-10 < POS>
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A; Residues: 1-544 <JUL>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Accession: A60703
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           neurofilament triplet L protein - pig
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ames: neurofilament light
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                                                                  Plessmann,
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glycine cleavage system protein P1 PA5213 [imported] - C;Species: Pseudomonas aeruginosa C;Date: 15-Sep-2000 #sequence_revision 15-Sep-2000 #tex C;Accession: E82994
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C;Species: Bos prinigentus taurus (cattle)
C;Date: 03-Jul-1998 #sequence_revision 10-Jul-1998 #text_change 07-May-1999
C;Accession: JW0094
R;Hashimoto, R.; Nakamura, Y.; Goto, H.; Wada, Y.; Sakoda, S.; Kaibuchi, K.; Inagaki, M. R;Hashimoto, R.; Nakamura, Y.; Goto, H.; Wada, Y.; Sakoda, S.; Kaibuchi, K.; Inagaki, M. Biochem. Biophys. Res. Commun. 245, 407-411, 1998
Biochem. Biophys. Res. Commun. 245, 407-411, 1998
A;Title: Domain- and site-specific phosphorylation of bovine NF-L by Rho-associated kine A;Reference number; JW0094; MUID:98238650; PMID:9571164
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                                                                                                                         E82994
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                                                                                                                                                  RESULT 12
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Best Local Similarity
Watches 6; Conserv
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A;Note: residue 322 is either lysine or arginine
R;Gonda, Y.; Nishizawa, K.; Ando, S.; Kitamura, S.;
Biochem. Biophys. Res. Commun. 167, 1316-1325, 1990
A;Title: Involvement of protein kinase C in the regular commun.
A;Reference number: A34569; MUID:90211318; PMID:2108
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A;Accession: A90973
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; Residues: 1-554 <HAS>
; Comment: Domain- and site-specific phosphorylation by Rho-kinase
; Superfamily: cytoskeletal keratin
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                                                                                                                                                                                                                                         141 EIRDLR 146
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                                                                                                                                                                                                                                                                                                 1 EIRDLR 6
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Pred. No. 1.2e+02;
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Pred. No.
                     15-Sep-2000 #text_change
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hes 0;
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                                                                                                                                                                                                                                                                                                                                                                                                              Length 554;
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                                                                                Pseudomonas aeruginosa
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                                                                                                                                                                                                                                RESULT 14
G69192
ABC transporter (glutamine transport ATP-binding protein) - Methanobacterium thermoa C;Species: Methanobacterium thermoautotrophicum
C;Date: 05-Dec-1997 #sequence_revision 05-Dec-1997 #text_change 02-Feb-2001
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C;Accession: B86238

R;Theologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H. ansen, N.F.; Hughes, B.; Huizar, L. Rature 408, 816-820, 2000

A;Authbors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, A;Authbors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, F. Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H. Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H. R.; Sun, A;Authbors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W. A;Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis.
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A;Residues: 1-958 <370>
A;Cross-references: GB:AE004934; GB:AE004091; NID:g9951515; PIDN:AAG08598.1;
A;Experimental source: strain PAO1
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                                                                                                                                                                                                                                                                                A; Molecule type: DNA
A; Residues: 1-133 <STO>
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C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 31-Mar-2001
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; Lory, S.; Olson, M.V.
Nature 406, 959-964, 2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Stover, C.K.; Pham, X.Q.; Erwin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Status: preliminary
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EVRDLR
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5; Conserv
  24
                                                                                           Conservative
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Y.; Brody, L.L.; Coulter, S.N.; Folger, K.R.; Kas, A.; Larbig, K.;
                                                                                                                                                                                                                                                        GB:AE005172; NID:g5091534; PIDN:AAD39563.1;
                                                                                                                 96.6%;
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Pred.
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Pred. No.
                                                                                         core 28; DB red. No. 40; Mismatches
                                                                                                          40;
BB
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2.1e+02;
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Conway, A.R.; Creasy, T.H.; Dewar
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                                                                                                                                    Length 133
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                                                                                      <u>;</u>
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J. Bacteriol. 179, 7135-7155, 1997

A;Title: Complete genome sequence of Methanobacterium thermoautotrophicum Delta A;Reference number: A69000; MUID:98037514; PMID:9371463

A;Accession: G69192

sequence

not shown; translation

;Smith, D.R.; Doucette-Stamm, L.A.; Deloughery, C.; Lee, H.; Dubois, J.; Aldredge, Qiu, D.; Spadafora, R.; Vicaire, R.; Wang, Y.; Wierzbowski, J.; Gibson, R.; Jiwani 1, S.; Church, G.M.; Daniels, C.J.; Mao, J.; Rice, P.; Noelling, J.; Reeve, J.N. Bacteriol. 179, 7135-7155, 1997

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R;Smith, D.R.;

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A;Molecule type: DNA
A;Residues: 1-220 <MTH>
A;Cross-references: GB:AE000849; GB:AE000666; NID:g2621780; PIDN:AAB85201.1; PID:g262178
A;Experimental source: strain Delta H
C;Genetics:
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                                                                                                                                                                                                                               A;Cross-references: EMBL:X75333; NID:g414186; PIDN:CAA53082.1; PID:g414187 C;Comment: This enzyme converts noradrenaline into adrenaline. C;Comment: Increased expression of this protein occurs in the adrenal medu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: DNA
A; Residues: 1-285 <SUH>
A; Residues: 1-285 <SUH>
A; Residues: 1-285 <SUH
A; Cross-references: EMBL: X75333; NID: 9414186; PIDN: CAA53082.1; PID: 9414187
A; Cross-references: EMBL: X75333; NID: 9414186; PIDN: CAA53082.1; PID: 9414187
A; Weisberg, E.P.; Baruchin, A.; Stachowiak, M.K.; Stricker, E.M.; Zigmond, M.J.; Kaplan, Brain Res. Mol. Brain Res. 6, 159-166, 1989
A; Title: Isolation of a rat adrenal cDN, 100
A; Title: Isolation of a rat adrenal cDN, 100
A; Reference number: A60060; MUID: 90135920; PMID: 2575695
A; Accession: A60060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N;Alternate names: noradrenaline N-methyltransferase C;Species: Rattus norvegicus (Norway rat) C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #t C;Accession: S38567; A60060; S03614; I56509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nucleic Acids Res. 17, 2125, 1989
A;Title: Cloning of the rat adrenal medullary phenylethanolamine-N-methyltransferase.
A;Reference number: S03614, MUID:89183620; PMID:2928117
A;Accession: S03614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Suh, Y.H.; Kim, S.S.; Choi, W.; Hong, I.A.; Chong, Y.H.
submitted to the EMBL Data Library, September 1993
A;Description: Structure and tissue specific expression of the rat phenylethanolamine N
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A; Residues: 1-285 <RES>
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A; Residues: 26-51,'H',53-203,'A',205-210,'H',212-213,'L',215-285 <MEZ>
A; Residues: 26-51,'H',53-203,'A',205-210,'H',212-213,'L',215-285 <MEZ>
A; Cross-references: EMBL:X14211; NID:956943; PIDN:CAA32428.1; PID:956944
A; Suh, Y.H.; Chun, Y.S.; Lee, I.S.; Kim, S.S.; Choi, W.; Chong, Y.H.; Hong,
T. Neurochem. 63, 1603-1608, 1994
                                                                                                                                                                                                                                                                                                                                                                                                                                          Title: Complete nucleotide sequence and tissue-specific expression of the rat phenyle; Reference number: I56509; MUID:95016700; PMID:7931317
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Residues: 'LA',18-210,'H',212-213,'L',215-285 <WEI>
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Db 250 EVRDLR 255

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Pfam; PF02518; HATFase_C; 1.

SMART; SM00387; HATFase_C; 1.

SMART; SM00387; HATFase_C; 1.

PROSITE; P850109; HIS_KIN; 1.

Sensory transduction; Transferase; Kinase; Phosphorylation.

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Sensory transduction; Transferase; Kinase; Phosphorylation.

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Sensory transduction;
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30-MAY-2000
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16-OCT-2001
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01-OCT-1996 (Rel. 34, Last sequence up
15-JUN-2002 (Rel. 41, Last annotation
Sensor protein degS (EC 2.7.3.-).
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InterPro; IPR003594; ATPbind_ATPase
InterPro; IPR004359; HIS_KIN_sig.
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SIMILARITY: CONTAINS 1 HISTIDINE KINASE DOMAIN.
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protein APE2096.
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P19527; Q63367;
01-FEB-1991 (Rel. 17, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
10-OCT-1901 (Rel. 40, Last annotation update)
10-OCT-1901 (Rel. 40, Last annotation update)
110-OCT-1901 (Rel. 40, Last sequence update)
110-OCT-1901 (Rel. 40, Last sequence update)
110-OCT-1901 (Rel. 17, Created)
110-OCT-1906 (Rel. 17, Created)
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                                                                                                                                                                                                                                                                                  Chin S.S., Liem R.K.H.;
"Expression of rat neurofilament proteins transfected non-neuronal cells.";
Eur. J. Cell Biol. 50:475-490(1989).
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; I
Mammalia, Eutheria; Rodentia; Sciurognathi; Muridae;
                                                                                the rat.
                                                                                                        Julien J.-P., Ramachandran K., Grosveld F.;
"Cloning of a cDNA encoding the smallest neurofilament protein
                                                                                                                                                                          MEDLINE-85252830; PubMed-3925999;
                                                                                                                                                                                                                                                                               Eur. J. Cell Biol.
                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. MEDLINE-90184052;
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                                                                                                                                                                                                                    SEQUENCE OF 197-483 FROM N.A.
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from

Euteleostomi; ; Murinae; Rat

Rattus

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SON DESCRIPTION OF STREET 
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InterPro; IPR002936; DNAprim_toprim.
Pfam; PF01751; Toprim; 1.
SMART; SM00493; TOPRIM; 1.
Hypothetical protein; Complete protein
SEQUENCE 426 AA; 47681 MW; 73A0B
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Dong D.L.-Y., Xu Z.-S., Chevrier
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16-OCT-2001 (Rel. 40, Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      664; IF.
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391
                                                                                                                                                                                                                                                                                                      61448
                                                                                                                                                                                                                                                                            100.0%;
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                                                                                                                                                                                                                                                                                                                              O-LINKED (GLCNAC) (BY SIMILARITY).
O-LINKED (GLCNAC) (BY SIMILARITY).
EPITOPE (RECONIZED BY IF-SPECIFIC MONOCLONAL ANTIBODY).
Y -> S (IN REF. 1).
Y -> I (IN REF. 1).
M -> K (IN REF. 2).
D -> H (IN REF. 1).
R -> A (IN REF. 1).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COIL 1A.
LINKER 1.
COIL 1B.
                                                                                                                                                                                                                                                                                                                                                                                                                                          COIL 2A.
LINKER 2.
                                                                                                                                                                                                                                                                                                                                                                                                                 TAIL, SUBDOMAIN A.
                                                                                                                                                                                                                                                                                                                                                                                                                                 COIL 2B
                                                                                                     Craniata; Vertebrata; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                             Score 29;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           LINKER 12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              co11;
                                                                                                                                                                                                                                                                                                      8EE9B8C6F0831D8C
                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Neurone; Glycoprotein
                                                           <u>ج</u>
:
                                   gene (NF-L): a unique exon-
filament gene family.";
                                                                                                                                                                                                                                                                                     DB 1;
                                                            Flavell
                                                                                                                                                                                                                                                                                                                                                                                                                   (ACIDIC)
                                                                                                                                                                                                                                                                                     Length 542;
                                                                                                                                                                                                                                                                                                       CRC64;
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                                                            D., Meijer D.,
                                                                                                             Euteleostomi;
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RA METSIANDANA IV., PETERPELOV A.V., POLYBKOV A.V., SITHIKOV V.F.,
RA Dadali E.L., Oparin R.B., Petrin A.N., Evgrafov O.V.;
RA Dadali E.L., Oparin R.B., Petrin A.N., Evgrafov O.V.;
RA Dadali E.L., Oparin R.B., Petrin A.N., Evgrafov O.V.;
RI Anew variant of Charcot-Marie-Tooth disease type 2 is probably the
RT result of a mutation in the neurofilament-light gene.";
RL Am. J. Hum. Genet. 67:37-46(2000).
RL Am. J. Hum. Genet. 67:37-46(2000).
RL Am. J. Hum. Genet. 67:37-46(2000).
RI Am. J. Hum. Genet. 67:37-46(2000).
RI Am. J. Hum. Genet. 67:37-46(2000).
ROUGHIN WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER.
C. II FUNCTION. NEUROFILAMENT SUITABLA FOR NEURONAL CALIBER.
C. II DUNAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH
C. PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FORM
C. A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH
C. ACHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH
C. OTHER NEURONAL COMPONENTS OR IONS.
C. INTERABEDUS: TYPE 2E (CMT2E).
C. INTERMEDIATE EILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL
C. INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM
C. ETTAMENTE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; X05608; CAA29097.1; -.
EMBL; S70309; AAD14057.1; -.
PIR; S07144; S07144.
Genew; HGNC:7739; NEFL.
MIM; 162280; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation. The European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                   CARBOHYD
SITE
                                                                                                                                                                                                                                                                       DOMAIN
DOMAIN
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DOMAIN
DOMAIN
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                                                  SEQUENCE
                                                                                                                                                     DOMAIN
CARBOHYD
                                                                                                                                                                                      DOMAIN
DOMAIN
                                                                                                                                                                                                                                      DOMAIN
DOMAIN
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PROSITE; PS002;
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MEDLINE-20307176; Pubm
                                                                                    VARIANT
                                                                                                                                                                                                                                                                                                                                                                           Disease mutation; INIT_MET 0
                                                                                                                                                                                                                       DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                              ntermediate
                                                                                                                                                                                                                                                                                                                                                                                                                                                             [nterPro; IPR001664; IF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT DATABASE: NAME-Inherited peripheral neuropathies www.uia.ac.be/CMTMutations/".
                                                                                                                                                                                                                                                                                                                                                                                                              PS00226; IF; 1.
iate filament; C
                                                  543 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                              filament;
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                                                                                                                                                                                                                                                                                                                                                                                             Charcot-Marie-Tooth
                                                  61645
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                             Coiled coil; Neurone; Glycoprotein; cot-Marie-Tooth disease.
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                                                                                                                                                                                                                      LINKER 1.
COIL 1B.
LINKER 12.
COIL 2A.
LINKER 2.
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                                                                                                                  COIL 2B.

TAIL, SUBDOMAIN A.

TAIL, SUBDOMAIN B. (ACIDIC).

O-LINKED (GLCNAC) (BY SIMILARITY).

O-LINKED (GLCNAC) (BY SIMILARITY).

EPITOPE (RECOGNIZED BY IF-SPECIFIC
                                                    MONOCLONAL ANTIBODY).
Q -> P (IN CMT2E).
/FTId=VAR_009703.
; 7A0F1ADD5BED22F6 CR
Score 29;
Pred. No.
DB
42;
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                                                      CRC64;
                     Length 543;
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Query Match Best Local S Matches 6

5 Similarity

Conservative

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Mismatches

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Indels

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                                             Query Match
Best Local
                               Matches
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01-OCT-1996
16-OCT-2001
                                                                                                                                                    CARBOHYD
CARBOHYD
                                                                                                                                                                                                                  DOMAIN
DOMAIN
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                                                                                                                                                                                                                                                                            DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                         DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Neurofilament architecture combines structural principles of intermediate filaments with carboxy-terminal extensions increa in size between triplet proteins."; EMBO J. 2:1295-1302(1983).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sus scrofa (Pig).
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                         SITE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=85154583; PubMed=3920075; Geisler N., Plessmann U., Weber K.;
                                                                                           SEQUENCE
                                                                                                        UNSURE
                                                                                                                                                                                                  DOMAIN
                                                                                                                                                                                                                                                                                                                                                        DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "The complete amino acid sequence of the major neurofilament protein (NF-L)."; FEBS Lett. 182:475-478(1985).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID-9823;
[1]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-JUL-1986 (Rel. 01, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Neurofilament triplet L protein (68 kDa neurofilament
(Neurofilament light polypeptide) (NF-L).
                                                                                                                                                                                     DOMAIN
                                                                                                                                                                                                                                                                                                                                                                     Intermediate
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                                            Local
 1 EIRDLR 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FUNCTION: NEUROPILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, M AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER. DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH THE NEUROPILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILMENT PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FO A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH OTHER NEUROPILAMENTS OR THE MOST ABUNDANT OF THE THREE NEUROPILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM
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                                                                                                                                                                                                                                                                                                                                                                                   PF00038; filament; 
re; PS00226; IF; 1.
                              Similarity
6; Conserv
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Cetartiodactyla; Suina; Suidae;
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100.0%; {
tive 0;
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COIL 2A.

COIL 2B.

COIL 2
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LINKER 1.
COIL 1B.
LINKER 12.
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                                                                                                        EPITOPE (RECOGNIZED B MONOCLONAL ANTIBODY). OR K.
                                               Score 29;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                     co11;
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                                                                                           83044813637AC739
                               Mismatches
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                                                            Length 548;
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                          Indels
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Sus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein)
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                               0
                               Gaps
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Hill W.D.,
Submitted (
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P02548; P7
                   DOMAIN
DOMAIN
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PIR; A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-JUL-1986 (Rel. 01, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Neurofilament triplet L protein (68 KDa neurofilament protein)
(Neurofilament light polypeptide) (NF-L) (Micro glutamic acid-rich
                                                                                                                 DOMAIN
DOMAIN
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Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                           use by non-profit institutions as long modified and this statement is not removed
                                                                                                                                                                                                                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sequence.";
FEBS Lett.
                                                                                                                                                  DOMAIN
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                                                                                                                                                                                                                                               Pfam;
                                                                                                                                                                                                                                                                                                                              or send
                                                                                                                                                                                                                                                                                                                                            entities requires
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE-85154567;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S Lett. 182:389-392(1985).

FUNCTION: NEUROFILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, M AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER. DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FO A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH OTHER NEURONAL COMPONENTS OR IONS.

MISCELLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM
                                                                                                                                                                                                                                                                                                                                                                                         European Bioinformatics
                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY
                                                                                                                                                                                                                                                                             A02964; QFBO
                                                                                                                                                                                                                                                                                                U83919; AAB41543.1;
                                                                                                                                                                                                                                                                                                                               an
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                , Zhang L., (FEB-1997)
                                                                                                                                                                                                                                                                                                                            equires a license agreement (S email to license@isb-sib.ch).
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L., Balin B.J., Sprinkle T.J.
997) to the EMBL/GenBank/DDBJ
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1244
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Cetartiodactyla; Run
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COIL 2A.
LINER 2.
COIL 2B.
TAIL, SUBDOMAIN A.
TAIL, SUBDOMAIN B (ACIDIC).
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TAIL (BY S
COIL 1A.
LINKER 1.
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LINKER 12.
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Institute. There a
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(BY SIMILARITY).
L (BY SIMILARITY).
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PNMT_RAT

1 P10937;

1 01-JUL-1989 (Rel. 11, Created)

1 01-CCT-1996 (Rel. 34, Last sequence update)

1 15-JUR-2002 (Rel. 41, Last annotation update)

2 Phenylethanolamine N-methyltransferase (EC 2.1.1.28)

DE Phenylethanolamine N-methyltransferase).
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21gmond M.J., Kaplan B.B.;
21gmond M.J., Kaplan B.B.;
11solation of a rat adrenal cDNA clone encoding
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MEDLINE-96035937; PubMed-7558218;
KOIKe G., Jacob H.J., Krieger J.E., Szpirer C., Hoehe M.R.,
Horluchi M., Dzau V.J.;
"Investigation of the phenylethanolamine N-methyltransferase gene as
a candidate gene for hypertension.";
Hypertension 26:595-601(1995).
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way
                                                                                                                                                  Mezey E.; "Cloning of the rat adrenal medullary phenylethanolamine-N-
                                                                                                                                                                                         SEQUENCE OF 26-285 FROM N.A.
STRAIN-Sprague-Dawley;
MEDLINE-89183620; PubMed-2928117;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE-95016700; PubMed-7931317;
Suh Y.H., Chun Y.S., Lee I.S., Kim S.S., Choi W.,
Hong L., Kim S.H., Park C.W., Kim C.G.;
"Complete nucleotide sequence and tissue-specific
rat phenylethanolamine N-methyltransferase gene.";
J. Neurochem. 63:1603-1608(1994).
                                                                                                                                                                                                                                                                                                                               TISSUE-Adrenal gland;
MEDLINE-90135920; PubMed-2575695;
                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF 16-285 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A
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MEDLINE-95016700; PubM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
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                                                                  leic Acids Res. 17:2125-2125(1989).

FUNCTION: CONVERTS NORADKENALINE TO ADRENALINE CATALYTIC ACTIVITY: S-adenosyl-L-methionine + phenyleth S-adenosyl-L-homocysteine + N-methylphenylethanolamine.

PATHWAY: Catecholamine biosynthesis; last step.

SIMILARITY: BELONGS TO THE NNWT/PNWT/TEMT FAMILY.
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Sciurognathi; Muridae;
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01-OCT-1993 (Rel. 27, I
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MEDLINE=90294716; PubMed-2163003;

Brenner M., Lampel K., Nakatani Y

Dohadwala M., Lipsky R., Freese E

"Characterization of human cDNA a
                                                                                                                                                                             SEQUENCE OF 28-430 FROM N.A.
MEDLINE-86101618; PubMed-3866511;
COWARN N.J., Lewis S.A., Balcarek J.M.,
"Structural implications of a cDNA clon
fibrillary acidic protein.";
Ann. N.Y. Acad. Sci. 455:575-582(1985).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Balcarek J.M., Cowan N.J.; "Structure of the mouse glial fibrillary acidic protein gene: implications for the evolution of the intermediate filament multigene
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EMBL; U11694; AAA91779.1;
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EMBL; X14211; CAA32428.1;
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16 17 DS -> LA (IN REF. 3).
17 DS -> LA (IN REF. 4).
18 DS -> H (IN REF. 4).
19 DS -> H (IN REF. 4).
204 T -> A (IN REF. 4).
204 T -> A (IN REF. 2 AND 3).
205 207 2085 V -> A (IN REF. 2).
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EMBL; M25937; AAA37679.1; -.
EMBL; X02801; CAA26571.1; ALT
EMBL; X78141; CAA55020.1; -.
PIR; B60052; VEMSCE;
MGD; MGI;95697; Gfap.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ralton J.E., Lu X., Hutcheson A.M., Quinlan R.A.;
"Identification of two N-terminal non-alpha-helical domain motifs
important in the assembly of glial fibrillary acidic protein,";
J. Cell Sci. 107:1935-1948(1994).

-I- FUNCTION: GFAP, A CLASS-III INTERMEDIATE FILAMENT, IS A CELL-
SPECIFIC MARKER THAT, DURING THE DEVELOPMENT OF THE CENTRAL
NERVOUS SYSTEM, DISTINGUISHES ASTROCYTES FROM OTHER GLIAL CELLS.
-I- SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY.
                                                                                                                                                                                                                                                                                                                                                      DOMAIN
DOMAIN
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Brain Res.
[5]
                                                                                    15-JUN-2002 (Rel. 41, Created)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Carbamoyl-phosphate synthase large chain, C-tr
6.3.5.5) (Carbamoyl-phosphate synthetase ammor
                                                                                                                                                                                                                                                                                                                    CONFLICT
SEQUENCE
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DOMAIN
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                                                                                                                                                         CAB2_METJA
Q58776;
SEQUENCE FROM N.A.
STRAIN-JAL-1 / DSM 2661 / ATCC 43067,
MEDLINE-96337999; PubMed-8688087;
                                         Archaea; Euryarchaeota;
Methanocaldococcaceae;
MCBI_TaxID-2190;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPRO01664; IF. Pfam; PF00038; filament; 1. PROSITE; PS00226; IF; 1.
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                                                                            Methanococcus jannaschii.
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5; Conserv
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Mol. Brain Res. 7:277-286(1990).
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COIL 1B.
LINKER 12.
COIL 2A.
LINKER 2.
COIL 2B.
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Pred. No.
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InterPro; IPR005479; CPase_L_D2.
InterPro; IPR005480; CPase_L_D3.
InterPro; IPR005481; CPase_L_N.
InterPro; IPR004362; MGS_like.
Pfam; PP00289; CPSase_L_chain; 1.
Pfam; PP002786; CPSase_L_D2; 2.
Pfam; PP002786; CPSase_L_D3; 1.
Pfam; PF02787; CPSase_L_D3; 1.
Pfam; PF02142; MGS; 1.
PRINTS; PR00098; CPSASE.
                           LAMA_CHICK
P13648;
01-JAN-1990
01-JAN-1990
16-OCT-2001
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HSSP; P00968;
TIGR; MJ1381;
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entities requires a license agreement (See http://www.isb
or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           jannaschi1.";
Science 273:1058-1073(1996).
-I- CATALYTIC ACTIVITY: 2 ATP + L-glutamine + CO(2) + H(2)
phosphate + L-glutamate + carbamoyl phosphate.
-I- COFACTOR: Binds three manganese ions (By similarity).
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                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                 PROSITE; PS00866; CPSASE_1; 1.
PROSITE; PS00867; CPSASE_2; 1.
Arginine biosynthesis; Pyrimidine biosynthesis; Ligase; ATP-binding;
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33 EVRDLR 38
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PATHWAY: Arginidine biosynthesis; first step.

PATHWAY: Pyrimidine biosynthesis; the small (or glutamine) chain SUBUNIT: Composed of two chains; the small (or glutamine) chain promotes the hydrolysis of glutamine to ammonia, which is used in the large (or ammonia) chain to synthesize carbamoyl phosphate
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SIMILARITY: BELONGS T
CAUTION: Sequence of
(MJ1378 and MJ1381).
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Blake J.A.,
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83.3%;
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FitzGerald
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ALLOSTERIC DOMAIN.
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MANGANESE 3 (BY SIMILARITY).
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sequence up annotation

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RESULT 13
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                                                                                                                                                             O9RWKO;
15-JUN-2002 (Rel. 41, Created)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation updat.
Carbamoyl-phosphate synthase large chain (E)
phosphate synthetase ammonia chain).
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J. Mol. B101. 208:393-404 (1989).
J. Mol. B101. 208:393-404 (1989).
J. FUNCTION: LAMINS ARE COMPONENTS OF THE NUCLEAR LAMINA, A FIBROUS LAYER ON THE NUCLEOPLASMIC SIDE OF THE INNER NUCLEAR MEMBRANE, WHICH IS THOUGHT TO PROVIDE A FRAMEWORK FOR THE NUCLEAR ENVELOPE AND MAY ALSO INTERACT WITH CHROMATIN.
J. SUBCELLULAR LOCATION: NUCLEAR:
SUBCELLULAR LOCATION: NUCLEAR:
SUBCELLULAR LOCATION: SUCLEAR:
SUBCELLULAR LOCATION: SUCLEAR: 
                                                    Bacteria, Thermus/Deinococcus
Deinococcaceae; Deinococcus
                                                                                                                                            CARB OR DR0668
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DOMAIN
DOMAIN
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InterPro; IPR001664; IF.
InterPro; IPR001322; IF_tail.
InterPro; IPR001230; Prenyl_site.
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                       NCBI_TaxID=1299
                                                                                                              Deinococcus radiodurans
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G.T., Lehner C.F.,
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Pred. No.
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FD0B31828A77AF08 CRC64;
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Alternative splicing.
HEAD.
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                                                                              Deinococci; Deinococcales;
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. 87;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (See http://www.isb-sib.ch/announce/
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InterPro; IPR005479; CPase_L_D3.
InterPro; IPR005481; CPase_L_D3.
InterPro; IPR005481; CPase_L_N.
Pfam; PF00289; CPSase_L_Chain; 2.
Pfam; PF02786; CPSase_L_D2; 2.
Pfam; PF02787; CPSase_L_D3; 1.
Pfam; PF02787; CPSASE_L, FALSE_N.
PROSITE; PS00866; CPSASE_1; FALSE_N.
PROSITE; PS00866; CPSASE_1; FALSE_N.
PROSITE; PS00867; CPSASE_1; 2.
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DOMAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -I- CATALYTIC ACTIVITY: 2 ATP + L-glutamine + CO(2) + H(2)O = 2 ADP phosphate + L-glutamate + Carbamoyl phosphate.
-I- COFACTOR: Binds three manganese ions (By similarity).
-I- PATHWAY: Arginine biosynthesis.
-I- PATHWAY: Pyrimidine biosynthesis; first step.
-I- SUBUNIT: Composed of two chains; the small (or glutamine) chain promotes the hydrolysis of glutamine to ammonia, which is used the large (or ammonia) chain to synthesize carbamoyl phosphate (or ammonia) chain to synthesize (or ammonia) chain to synthesi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=20036896; PubMed=10567266; White O., Eisen J.A., Heidelberg J.F., Hickey E.K., Peterson J.D. White O., Eisen D.H., Gwinn M.L., Nelson W.C., Richardson D.L., Dodson R.J., Haft D.H., Gwinn M.L., Nelson W.C. Shen M., Moffat K.S., Qin H., Jiang L., Pamphile W., Crosby M., Shen M., Moffat K.S., Olin H., Jiang L., Pamphile W., Crosbe M., Shen M., Wamathevan J.J., Lam P., McDonald L., Utterback T., Zalewski C., Makarova K.S., Aravind L., Daly M.J., Minton K.W., Fleischmann R.M., Makarova K.S., Aravind L., Daly M.J., Minton K.W., Fleischmann R.J., Ketchum K.A., Nelson K.E., Salzberg S., Smith H.O., Venter J.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Arginine bio 
ATP-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; AE001924; AAF10248.1; HSSP; P00968; 1A9X.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Science 286:1571-1577(1999)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Genome sequence of the radioresistant bacterium Deinococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fraser C.M.;
                       1 EIRDLR 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 similarity).
SIMILARITY: BELONGS TO THE CARB FAMILY.
EVRDLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SWISS-PROT entry is copyright. It is produced through a collaboration sen the Swiss Institute of Bioinformatics and the EMBL outstation
                                                                                      Similarity
5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PS00866; CPSASE_1; FALSE_NEG. PS00867; CPSASE_2; 2. blosynthesis; Pyrimidine blos
                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Manganese;
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1024
1024
210
353
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822
                                                                                                              96.6%;
                                                                                                                                                                                   111646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pyrimidine biosynthesis; Ligase; Repeat; Complete proteome.
CARBOXYPHOSPHATE SYNTHETIC DOMAIN.
                                                                                      Score 28; DB Pred. No. 1.4e1; Mismatches
                                                                                                                                                                                   ₹.
                                                                                                                                                                              MANGANESE 1 (BÝ SIMILARITY).
MANGANESE 1 AND 2 (BY SIMILARITY).
MANGANESE 2 (BY SIMILARITY).
MANGANESE 3 (BY SIMILARITY).
MANGANESE 3 (BY SIMILARITY).
MANGANESE 3 (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                         ATP (POTENTIAL).
ATP (POTENTIAL).
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                                                                                                                                                                                                                                                                                                                                                                                                                    DOMAIN
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                                                                                                              4e+02
                                                                                                                                   Length 1024;
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RESULT 14
VGNB_RCMV

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PROA_PSEAE
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Matches 5
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P35930;
01-JUN-1994 (Rel. 2
01-JUN-1994 (Rel. 2
15-JUN-2002 (Rel. 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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01-JUN-1994 (Rel. 29, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Genome polyprotein B (Contains: Protease cofactor; Membrane binding protein; VPG; Protease (EC 3.4.22.); RNA polymerase (EC 2.7.7.48)].
Red clover mottle virus (RCMV)
                                                                                                                                                                                                                                                                                                                            1726
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ACT_SITE
ACT_SITE
SEQUENCE
                     Gamma-glutamy1 phosphate reductase (GPR) (EC 1.2.1.41) (Glutamate-5-semialdehyde dehydrogenase) (Glutamy1-gamma-semialdehyde dehydrogenase) (GSA dehydrogenase).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (RNA)(N).
-i- PTM: SPECIFIC ENZYMATIC CLEAVAGES IN VIVO YIELD MATURE
-i- SIMILARITY: TO OTHER COMOVIRUSES GENOME POLYPROTEIN B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              J. Gen. Virol.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE-93019077; PubMed-1402822.
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                   dehydrogenase) (GSA PROA OR PA4007.
                                                                                                            О9НХŽО;
16-ОСТ-2001 (Rel. 40, Created)
16-ОСТ-2001 (Rel. 40, Last sequence up
16-ОСТ-2001 (Rel. 40, Last annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; X64886; CAA46104.1;
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Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEROPS; C03.003; -.
                                                                                                                                                                                                        PROA_PSEAE
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                                                                                                                                                                                                                                                                                                                            EVRDLR 1731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nucleotide sequence of red clover mottle virus bottom
                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hydrolase;
                                                                                                                                                                                                                                                                                                                                                                                                                Score 28; DB Pred. No. 2.7e

1; Mismatches
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WEMBRANE-BINDING PROTEIN (POTENTIAL).

VPG PROTEIN (POTENTIAL).

PROTEASE (POTENTIAL).

RNA-DIRECTED RNA POLYMERASE (POTENTIA ATP (POTENTIAL).
                                                                                                                                                                                                          PRT;
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PROTEASE (POTENTIAL).
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2.7e+02;
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A Stover C.K., Pham X.-Q.T., Erwin A.L., Mizoguchi S.D., Warrener P.,

A Hickey M.J., Brinkman F.S.L., Hufnagle W.O., Kowalik D.J., Lagrou M.,

A Hickey M.J., Brinkman F.S.L., Hufnagle W.O., Kowalik D.J., Lagrou M.,

A Hickey M.J., Brinkman F.S.L., Hufnagle W.O., Kowalik D.J., Lagrou M.,

A Brody L.L., Goltry L., Tolentino E., Westbrock-Wadman S., Yuan Y.,

A Brody L.L., Coulter S.N., Folger K.R., Kas A., Larbig K., Lim R.M.,

Brody L.L., Coulter S.N., Folger K.R., Wu Z., Paulsen I.T.,

A Brith K.A., Spencer D.H., Wong G.K.-S., Wu Z., Paulsen I.T.,

Reizer J., Saier M.H., Hancock R.E.W., Lory S., Olson M.V.;

"Complete genome sequence of Pseudomonas aeruginosa PAO1, an

"Complete genome sequence of Pseudomonas aeruginosa PAO1, an

"Topportunistic pathogen.";

U Nature 406:959-964(2000).

L Nature 406:959-964(2000).

L Nature 406:959-964(2000).

C -I- FUNCTION: CATALYZES THE NADPH DEPENDENT REDUCTION OF L-GAMMA-

GLOTAMYL 5-PHOSPHATE INTO L-GLUTAMATE 5-SEMIALDEHYDE AND

PHOSPHATE. THE PRODUCT SPONTANEOUSLY UNDERGOES CYCLIZATION TO FORM
                                                                                                                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EM the European Bioinformatics Institute. There are no restruse by non-profit institutions as long as its content modified and this statement is not removed. Usage by and entities requires a license agreement (See http://www.isb-sor send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                 EMBL; AE004817; AAG07394 1; ...
InterPro; IPR00965; Gglutt_pp_reduct.
Pfam; PF00171; aldedh; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN-ATCC 15692
MEDLINE-20437337;
                                                                                                                                                      Oxidoreductase; Proline biosynthesis; NADP; Complete progressed 421 AA; 45044 MW; 447C9171BC5F3FFD CRC64;
                                                                                                                                                                                            TIGREAMS; TIGRO0407; proA PROSITE; PS01223; PROA; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bacteria; Proteobacteria; gamma subdivision; Pseudomonadaceae;
  99
                                    1 EIRDLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NADP(+) = L-gamma-glutamyl 5-phosphate + NADPH.
PATHMAY: Proline biosynthesis; second step.
SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
SIMILARITY: BELONGS TO THE GAMMA-GLUTAMYL PHOSPHATE REDUCTASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1-PYRROLINE-5-CARBOXYLATE.
CATALYTIC ACTIVITY: L-glutamate 5-semialdehyde
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FAMILY
  EIRDMR
                                                                           Similarity
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                                                                                               93.1%;
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                                                                                             Score 27;
Pred. No. 9
                                                                                 Mismatches
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GenCore version 5.1.3 Copyright (c) 1993 - 2002 Compugen Ltd.

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Result
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Q6QQX9
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Best Local Similarity 100.0%;
Matches 6; Conservative 0
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MEDILINE-20481657; PubMed=11024146;

MEDILINE-20481657; PubMed=11024146;

Yamaguchi T., Kaplan S.L., Wakenell P., Schat K.A.;

Yamaguchi T., Kaplan S.L., Wakenell P., Schat K.A.;

"Transactivation of latent Marek's disease herpesvirus genes in QT35,

a quali fibroblast cell line, by herpesvirus of turkeys.";

J. Virol. 74:10176-10186(2000).

EMBL; AF193002; AAG27971.1; -.

InterPro; IPR000837; Leuzip_Fos.

InterPro; IPR000837; Leuzip_Fos.

InterPro; IPR000837; TF_DZIP.

Pfam; PF00170; DZIP; 1.

PRINTS; PR00042; LEUZIPPRFOS.

SMART; SM00338; BRLZ; 1.
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Q9E869;
01-MAR-2001 (TrEMBLrel. 16,
01-MAR-2001 (TrEMBLrel. 20,
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Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
Alphaherpesvirinae; Infectious laryngotracheitis-like viruses.
NCBI_TaxID-10386;
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70 EIRDLR 75
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11869 MW;
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Q9XIYO;
Q9XIYO;
O1-NOV-1999 (TrEMBLrel. 12, C;
O1-NOV-1999 (TrEMBLrel. 12, L;
O1-DEC-2001 (TrEMBLrel. 19, L;
O1-DEC-3001 (TrEMBLrel. 19, L;
Oryza sativa (Rice).
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MEDLINE-20481657; PubMed-11024146;
Yamaguchi T., Kaplan S.L., Wakenell P., Schat K
"Transactivation of latent Marek's disease herpe
a quail fibroblast cell line, by herpesvirus of
J. Virol. 74:10176-10186(2000).
EMBL; AF193011; AAG29915.1; -.
InterPro; IPR000837; Leuzip_Fos.
InterPro; IPR000837; Leuzip_Fos.
InterPro; IPR0004827; TF_bZIP.
Pfam; PF00170; bZIP; 1.
PRINTS; PR00042; LEUZIPPRFOS.
SMART; SM00338; BRLZ; 1.
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09E861;
01-MAR-2001
01-MAR-2001
01-MAR-2002
                                                                                                                                                                                                Submitted (APR-1999) to the EMBL/GenBank/DDBJ databases EMBL; AB026295; BAA81850.1; ... Hypothetical protein.
                                                                                                                                                                                                                                                                   STRAIN-CV. NIPPONBARE;
Sasaki T., Nagamura Y., Yamamoto K.;
Sasaki T., Nagamura Y., Yamamoto K.;
"Oryza sativa nipponbare(GA3) genomic DNA,
clone:P0681F10.";
                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Ehrhartoldeae; Oryzeae; Oryza.
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Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
Alphaherpesvirinae; Infectious laryngotracheitis-like viruses.
NCBI_TaxID-10386;
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Similarity 100.0%;
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2 (TrEMBLrel.
n (Fragment).
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virus of turkeys
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OSCIGB;
01-JUN-2001 (TrEMBLrel 1
01-JUN-2001 (TrEMBLrel 1
01-JUN-2002 (TrEMBLrel 2
                                                                                                                                                                                       Wei P., Cui 2.;
"The comparison of meg gene sequences amplified from different pathotypes of Marek's disease virus.";
Chin. J. Prev. Vet. Med. 24:88-92(2002).
EMBL; AF493551; AAL99997.1;
SEQUENCE 338 AA; 37126 MW; FD039B3A25DB438A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q8QQY1;
01-JUN-2002 (
01-JUN-2002 (
01-JUN-2002 (
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SMART; SM0382; AAA; 1.
PROSITE; PS00211; ABC_TRANSPORTER; 1.
Hypothetical protecin; Complete proteome.
SEQUENCE 242 AA; 27098 MW; 17D821923C156EE6 CRC64;
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Viruses; dsDNA viruses,
Alphaherpesvirinae; Marc
NCBI_TaxID=10390;
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EMBL, AB006165, AAK03350.1; --
InterPro; IPR00359; ABC. transportr.
Pfam; PF00005; ABC_tran; 1.
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STRAIN-814;
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May B.J., Zhang Q., L1 L.L., Paust
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. STRAIN-PM70;
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Bacteria; proteobacteria; gamma subdivision; Pasteurellaceae;
102
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tive 0;
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17,
21,
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k's disease-like viruses.
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                                                                                     Score 29; DB 14;
Pred. No. 2.4e+02;
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   Query Match
Best Local S
Matches 6
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Best Loc
Matches
                                                                                                                                                                                          EMBL; AF243438; AAG14278.1;

EMBL; AF243438; AAG14255.1;

Interpro; IPR000837; Leuzip_Fos.

Interpro; IPR004827; TF_DZIP.

Pfam; PF00170; bzIP;

PRINTS; PR00042; LEUZIPPRFOS.

PRINTS; PR00042; LEUZIPPRFOS.

PRINTS; PR00038; BRLZ; 1.

PROSITS; SM00338; BRLZ; 1.

PROSITS; PS00036; BZIP_BASIC; 1.
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O9DGW5;
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01-JUN-2002
01-JUN-2002
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Viruses; dsDNA viruses, no F
Alphaherpesvirinae; Marek's
NCBI_TaxID=10390;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TULMAN E.R., AfONSO C.L., LU Z., ZSAK L., ROCK SUBMILTEG (MAR-2000) to the EMBL/GenBank/DDBJ c. SUBCELLULAR LOCATION: NUCLEAR (BY SIMILARIT I. SIMILARITY: BELONGS TO THE BZIP FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MDV005 OR MDV076.
Turkey herpesvirus.
Viruses; dsDNA viruses,
Alphaherpesvirinae; Mare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "The comparison of med gene sequences am pathotypes of Marek's disease virus.; Chin. J. Prev. Vet. Med. 24:88-92(2002). EMBL: AF493555; AAM00002.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. STRAIN-CVI988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tulman E.R., Afonso C.L., Lu Z., Zsak L., Rock The genome of a very virulent Marek's disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
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       Similarity
6; Conserv
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                                                                                                                                     r protein.
37224 MW;
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20,
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s disease-like viruses.
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s disease-like viruses.
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   Score 29; DE
Pred. No. 2.4
); Mismatches
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Pred. No. 2.4
); Mismatches
                                                                                                                                            D2B1E34450B8463A CRC64;
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   2.4e+02;
hes 0;
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databases.
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                                                                  Length 339;
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Best Local :
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Q8QQY2;
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Q1-JUN-2002
Q1-JUN-2002
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SEQUENCE
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                                                                                                  Turkey herpesvirus.
Viruses; dsDNA viruses,
Alphaherpesvirinae; Mar
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       SEQUENCE FROM N.A
                                             NCBI_TaxID=10390;
[1]
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VARIANT
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SEQUENCE FROM N.A.

SPECIES-TURKEY herpesvirus; STRAIN-GA;

SPECIES-TURKEY herpesvirus; STRAIN-GA;

Lee L.F., Wu P., Sul D., Ren D., Kung H.J.;

"The Complete UI Sequence of Serotype I Marek's Disea

Proc. Natl Acad. Sci. U.S.A. 0:0-0(2000).

-I- SUBCELLULAR LOCATION: NUCLEAR (BY SIMILARITY).

-I- SIMILARITY: BELONGS TO THE BZIP FAMILY.

EMBL; M89471; AAB48631.1; -.

EMBL; M89471; AAB48631.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
SPECIES-gallid herpesvirus
MEDLINE-92237304; Fin. T.T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Viruses; dsDNA viruses, no I
Alphaherpesvirinae; Marek's
NCBI_TaxID=10388, 10390;
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01-NOV-1996 (TremBLrel.
01-MAR-2002 (TremBLrel.
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Jones D., Lee L., Liu J.L., Kung H.J., Tillotson J.k
"Marek disease virus encodes a basic-leucine zipper
"the fos/jun oncogenes that is highly expressed in ly
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Q1-JUN-2002
Q1-JUN-2002
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EMBL; AF49353; AAL99999.1; -. SEQUENCE 339 AA; 37156 MW; AA71COCF3E7C183A
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EMBL; AF493552; AAL99998.1; -. SEQUENCE 339 AA; 37302 MW; DC323E5172F9FB11 CRC64
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Wel P., Cul Z.;
"The comparison of meg gene sequences amperison of meg gene seque
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Viruses; dsDNA viruses, no i
Alphaherpesvirinae; Marek's
NCBI_TaxID=10390;
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"The comparison of meg gene sequences ampathotypes of Marek's disease virus.";
Chin. J. Prev. Vet. Med. 24:88-92(2002).
EMBL; AF493554; AAM00001.1; -.
SENDL; AF493554; AAM00001.1; -.
SENDL; AF493554; AAM00001.1; -.
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Q8QQX8;
01-JUN-2002
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"The comparison of meg gene sequences am pathotypes of Marek's disease virus.";
Chin. J. Prev. Vet. Med. 24:88-92(2002).
EMBL; AF493556; AAM00003.1; -.
SEQUENCE 339 AA; 37229 MW; 1C405660C
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Viruses; dsDNA viruses, no I
Alphaherpesvirinae; Marek's
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Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
Alphaherpesvirinae; Marek's disease-like viruses.
NCBI_TaxID=10390;
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s disease-like viruses.
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Search completed: November 13, 2002, 13:16:11 Job time: 21.2766 secs
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STRAIN-64BA;

Wei P., Cui Z.;

"The comparison of meg gene sequences amplified from different pathotypes of Marek's disease virus.";

Cathotypes of Marek's disease virus.";

Chin. J. Prev. Vet. Med. 24:88-92(2002).

EMBL, AF493558; AAM00005.1; -.

EMBL, AF493558; AAM00005.1; -.

SEQUENCE 339 AA; 37226 MW; CEA86F3B79474527 CRC64;

SEQUENCE 339 AA; 37226 MW; CEA86F3B79474527 CRC64;
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O1-JUN-2002 (TremBLrel. 21,

O1-JUN-2002 (TremBLrel. 21,
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Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
Alphaherpesvirinae; Marek's disease-like viruses.
NCBI_TaxID=10390;
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Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
Alphaherpesvirinae; Marek's disease-like viruses.
NCBI_TaxID-10390;
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Gapop 10.0 , Gapext 0.5
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26.879 Million cell updates/sec
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1. /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1980.DAT:*

2. /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1982.DAT:*

3. /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1983.DAT:*

4. /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1983.DAT:*
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/SIDS2/gcgdata/geneseq/geneseqp-embl/AA2001.DAT:*
/SIDS2/gcgdata/geneseq/geneseqp-embl/AA2002.DAT:*
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/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA1996.DAT:*
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SUMMARIES

10987654321	Result No.
	Score
100.0 100.0 100.0 92.3 89.7 87.2 84.6 84.6	Query Match
441 543 640 1093 1975 14 85	Query Match Length DB
222222222	BB
AAB05932 AAW20612 AAW93466 AAW80296 ABB57243 ABB62094 AAB62094 AAW98744 AAW9874	IB
Test antigen #8 fo Human neurofilamen Human molypeptide, Human mitochondria Mouse ischaemic co Human lipid metabo Drosophila melanog Human peptide #201 HIV-1 group O isol	Description

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ALIGNMENTS

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AAB05932
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XX Homc
XX Est
PN W020
XX Est
PN W220
XX W2

AAB05932 standard; peptide; 8 AA.

AAB05932;

17-OCT-2000 (first entry)

Test antigen #8 for spongiform and demyelinating disease diagnosis.

Human; cow; myelin; myelin neurofilament; immunogen; antigen; bovine spongiform encephalopathy; BSE; multiple sclerosis; Creutzfeld-Jacob disease; CJD; demyelinating disease; diagnostic test.

Bos taurus. Homo sapiens.

02-JUN-2000.

WO200031545-A1.

25-NOV-1999; 99WO-GB03936.

26-NOV-1998; 98GB-0025948.

(UNLO) KING'S COLLEGE.

Ebringer A;

WPI; 2000-400194/34.

Diagnosing spongiform or demyelinating disease in vertebrates such as bovine spongiform encephalopathy and Creutzfeld-Jacob disease comprises

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Best Local Similarity
Matches 8; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                   Human; beta-amyloid precursor protein; beta-APP; diagnosis; cancer; frameshift mutation; age-related disease; neurodegenerative disorder; Alzheimer's disease; Down's syndrome; myotonic dystrophy; neuronal; Huntington's disease; bown's syndrome; myotonic dystrophy; neuronal; diabetes mellitus type II; microtubule associated protein; Tau; Big Tau; ubiquitin B; apolipoprotein E; MAP2; neurofilament-L; neurofilament-M; neurofilament-F; presentlin I; presentlin II; cellular tumour antigen; glial fibrillary acidic protein; GFAP; p53; semaphorin III; HUPF-1; bcl-2; B-cell leukemia/lymphoma 2 proto-oncogene; HMGP-C; NSP-A; high mobility group protein-C; neuroendocrine specific protein A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                          Diagnosing disease by detecting frameshift mutations in RNA or corresponding protein mutations - used to diagnose cancer and neurological diseases, particularly Alzheimer's disease, and also for treatment and prevention with specific ribozymes or wild-type RNA
                                                                                                                                                                                   (UYUT-)
(ROYA-)
(UYRO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAY20612 standard; Protein; 441
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                                                                                                                N-PSDB;
                                                                                                                 WPI; 1998-609901/51.
N-PSDB; AAX75758.
                                                                                                                                                                                                                                               10-APR-1997;
                                                                                                                                                                                                                                                                          02-APR-1998;
                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
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ROYAL NETHERLANDS ACAD ARTS
UNIV ROTTERDAM ERASMUS.
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Disclosure; Figure

7;

258pp;

English

The invention relates to primers for synthesising rull length of clones. 830 cDNA molecules encoding a human protein have been isolated and nucleotide sequences of 5'- and 3'-ends of the cDNA molecules have been determined. Primers for synthesising the full molecules......

the full length in encoded by

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#999999999999999999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   caused by, or associated with, an RNA molecule that has a frameshift contract and wide range of neurodegenerative diseases, especially cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's contract and the solution of the method is used to diagnose age-related diseases, especially contract and a wide range of neurodegenerative disorders (e.g. Alzheimer's contract and the solution of alzheimer's disease, alzheimer's contract and solution of alzheimer's disease in living patients, at an early stage. It is based on the observation that disease may be considered by mutations in RNA rather than DNA. The invention describes the used of neuronal system RNA molecules, specifically proteins including beta-amyloid precursor protein (beta-App), the microtubule associated proteins Tau and Big Tau, ubiquitin B, apolipoprotein E, microtubule associated protein 2 (MAP2), neurofilament-L, neurofilament-L, considered protein (BAP2), neurofilament-L, neurofilament-L, considered protein (BAP2), neurofilament-L, neurofilament-L, collidary acidic protein (BAP2), the cellular tumour antigen p53, B-cell leukemia/lymphoma (BC) (BNGP-C) and neuroendocrine specific protein A.
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AAM93466
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Best Local S
Matches
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11-JAN-2000;
02-MAY-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                 Homo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAM93466;
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                                                                                                                                                 WPI; 2001-524255/58.
N-PSDB; AAK94387.
                                                                                 Claim
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                                                                                                         Primers useful for synthesizing in genetic manipulation -
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8; Conser
                                                                                                                                                                                                        Nishikawa T,
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; 2000JP-0118774.
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llarity 100.0%;
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                                                                                                                                                                                        Sugiyama
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                                                                                 3132; 1380pp
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a T, Na
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Nagai
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       3132.
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Pred. No. 23;
Mismatches
                                                                                 + sequence listing;
                                                                                                                                                                                           Hayashi K,
K, Kojima
                                                                                                                          full length cDNA clones
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S, Otsuki
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T, Koga
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RESULT 4
AAY80296
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                                           AAZ95320 to AAZ95359 represent antisense oligonucleotides targeted to a nucleic acid molecule encoding human mitochondrial phosphoenolpyruvate carboxykinase (also known as PEPCK-mitochondrial; PEPCK-W; PCK2 and mtPEPCK), where the oligonucleotide specifically hybridise with and inhibit the expression of human mtPEPCK. The antisense oligonucleotides can be used for inhibiting the expression of mtPEPCK in human cells or tissues in vitro and can also be used for treating an animal, particularly a human suspected of having or being prone to a condition or disease associated with expression of mtPEPCK. They can also be used in diagnostics and as research reagents in sandwich and other assays. The present sequence represents human mtPEPCK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the cDNA. The full length clones were obtained by construction of full length enriched cDNA libraries that were synthesised by the oligo-capping method. The primers enable the production of the full length cDNA easily without any special methods. The present sequence is a polypeptide encoded by a full length human cDNA of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in CD-ROM format directly from EPO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; mitochondrial phosphoenolpyruvate carboxykinase; PEPCK-mitochondrial; mtPEPCK; antisense oligonucleotide; phosphorothicate; inhibition; diagnosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense compound targeted to a nucleic acid molecule en human mitochondrial phospheenolpyruvate carboxykinase useful treating a human with a mitochondrial phosphoenolpyruvate carboxykinase-associated disease .
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Sequence
                                                                                                                                                                                                                                                                                                                                                                                         Example 13; Column 41-46; 32pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human mitochondrial phosphoenolpyruvate carboxykinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N-PSDB;
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DB; AAZ95313.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         encoding
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Query Match Best Local Similarity

92.3%;

Score Pred.

36; No.

DB 21; 1.2e+02;

Length 640;

RESULT 6 ABB08201 ID ABB

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ABB08201 standard;

Protein;

1093 AA

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RESULT 5
ABB57243
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                                                                                                                                  The present invention describes a method for examining ischaemic conditions, comprising measuring the expression levels of particular cyenes (I) in a test sample or determining the expression profile of a gene group in the sample comprising genes selected from (I). The method is useful for examining the ischaemic condition (e.g. compressive condition) (e.g. compressive ischaemia or vasospastic ischaemia) by measuring certain expression levels of particular genes (ABI99202 to ABI99912, encoding the protein sequences in ABB57020 to ABB57374) or by determining the expression levels or expression profile of a gene group comprising these genes. The capression levels or expression profiles produced by these genes are used as an indicator when screening for ischaemic condition improving the content of the present PCR primers for a mouse ischaemic condition related sequence, which are used in the exemplification of the present invention.
                                                    Query Match
Best Local S
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                       Examining the ischemic condition (e.g. occlusive ischemia) by measuring expression levels of particular genes defined in the specification or by determining the expression profile of a gene group comprising these
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mouse; ischaemia; compressive ischaemia; occlusive ischaemia;
vasospastic ischaemia; ischaemic condition; ischaemic disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABB57243
                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                 Claim 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ishikawa K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-MAY-2001;
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EEEVRDLR
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                                                    Similarity 6; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABI99627
                                                                                                                                                                                                                                                                                                                                                  Page 1635-1637; 2690pp;
                                                                                                         403 AA;
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                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Asai S,
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                                                                    .08;
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                                                    Score 35; DB
Pred. No. 1.2e
2; Mismatches
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                                                    . 1.2e+02;
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Matches 7
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                                                                                                                                                               exogenous compounds on the expression of nucleic acid and amino acid sequences of lipid metabolism enzymes. LMEs may also be used to screen for compounds that modulate the activity of LME. Polynucleotides encoding LME may be used for somatic or germline gene therapy, to detect and quantify gene expression in biopsied tissues in which expression of LME may be correlated with disease, to generate a transcript image of a tissue or cell type, to generate hybridization probes useful in mapping the naturally occurring genomic sequence, and for screening libraries of compounds in drug screening techniques. The polypeptide sequences may be used to analyse the proteome of a tissue or cell type. Oligonucleotide primers derived from polynucleotide sequences encoding LME may be used to analyse the proteome of a tissue or cell type. Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-MAY-2000;
25-MAY-2000;
07-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                         The sequence represents a novel human lipid metabolism enzyme (LME-1) of the invention. The invention relates to novel human LME's, and the polynucleotides which identify and encode them. The enzymes of the invention have cytostatic, neuroprotective, immunosuppressive, anti-inflammatory, and cardiovascular activity. The polypeptides and polynucleotides have a use in gene therapy and enzyme therapy. The lipid metabolism enzymes are useful in the diagnosis, treatment and prevention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           immunosuppressive; anti-inflammatory; cardiovascular; gene therapy; enzyme therapy; cancer; neurological disorder; autoimmune disorder; inflammatory disorder; cardiovascular disorder.
                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                           of cancer, neurological disorders, autoimmune/inflammatory disorders, and cardiovascular disorders, and in the assessment of the effects of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New lipid metabolism enzymes useful for diagnosing, treating and preventing cancer, neurological disorders, autoimmune/inflammatory disorders, and cardiovascular disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 106-108; 122pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-089794/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-MAY-2001; 2001WO-US15210
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; LME-1; lipid metabolism enzyme-1; cytostatic; neuroprotective;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human lipid metabolism enzyme-1 (LME-1).
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   934
                                                                 Local Similarity hes 7; Conserv
EQEIRDL 940
                   EQEIRDL 7
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, Gandhi AR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Thornton M;
                                                                                                                                    1093 AA;
                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; 2000US-203511P.
; 2000US-207903P.
; 2000US-210150P.
; 2000US-213392P.
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                                                               87.2%; Score 34; DB
100.0%; Pred. No. 4.:
Live 0; Mismatches
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Au-young J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lal
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                                                                                                   BB
                                                                                   4.8e+02;
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Kearney L, F
                                                                                                   23;
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                                                                                                 Length 1093;
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RESULT 8
AAM98744
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Matches 7
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                                                                                                                                                                               1842
                                                                                            AAM98744;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signalling and cell-cell interactions -
                                            Human peptide #2019 encoded
                                                                     24-JAN-2002
                                                                                                                 AAM98744 standard; Peptide;
                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                    at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                The sequence data for this patent did not form specification, but was obtained in electronic :
                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; SEQ ID NO 13074; 21pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Venter JC, Adams M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (PEKE )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-MAR-2000;
11-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-MAR-2001; 2001WO-US09231
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABB62094;
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                                                                                                                                                                                                      1 EQEIRDLR 8
                                                                                                                                                                               EQETRDLR 1849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001-656860/75
                                                                                                                                                                                                                             . Similarity 7; Conserv
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                                                                                                                                                                                                                                                                             1975 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    developmental biology; cell signalling; insecticide;
                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000US-191637P
2000US-0614150
                                                                     (first
                                                                    entry)
                                                                                                                                                                                                                                        87.2%;
87.5%;
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                                            by a SNP oligonucleotide.
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                                                                                                                                                                                                                                        DB 22;
8.7e+02;
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                                                                                                                                                                                                                                                                                                                n part of the printed format directly from
                                                                                                                                                                                                                                                    Length 1975;
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Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic; neuroprotective; antimicrobial; gene therapy; vaccine; amylase; can amyloid protein; angiopoietin; apoptosis related protein; cadherin;

cancer;

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RESULT 9
AAYU5631
ID AAYU
XX AAYU
AC AAYU
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XX I9-J
DT 19-J
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to oligonucleotides (see AAL26793-AAL34659)
cencoding polymorphic variants of proteins related to amylases, amyloid
proteins, angiopoletin, apoptosis related proteins, cadherin, cyclin,
cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin, cyclin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Polymorphic nucleic acids encoding e.g. amylases, cyclins, polymerases, oncogenes and histones, useful for diagnosing and treating, e.g. cancer, autoimmune diseases and infections –
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-465210/50.
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27-DEC-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 4110; 4143pp; English.
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                                                                                                          HIV-1 group O; C diagnosis; AIDS.
                                                                                                                                                                                                T-AIR
                                                                                                                                                                                                                                                                                                                                                                  AAY05631 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
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     WO9904011-A2
                                                         Human immunodeficiency virus type
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                                                                                                                                                                                                                                                                                                           AAY05631;
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EEDIRDLR 8
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                                                                                                                                                                                           group O isolate MP645 Vpu protein.
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6; Conser
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2000US-0173419
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                                                                                                                                    Outlier
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75.0%;
                                                                                                                                          strain;
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Pred. No.
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                                                                                                                                          Vpu protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
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                                                                                                                                               antigen;
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AAYO5637
ID AAYO5637
XX AAYO5
XX 19-JU
XX 119-JU
XX HIV-1
XX HIV-1
XX WO991
XX WO999
XX HUMAI
XX 20-JI
XX 118-JI
XX Dela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            of MP645 (see AAX25180). The invention relates to new HIV-1 group 0 cc antigens, especially envelope protein antigens (see AAX0546-625), cc and the use of these antigens, or nucleic acids encoding them (see Cc AAX25154-80), in the diagnosis and prophylaxis of AIDS. They can be cc used as reagents for detecting HIV-1 group 0 infection and for cc vaccines that provide protective immunity against HIV-1 here in particular against HIV-1 group 0 infection. cc in particular against HIV-1 group 0 infection, comprise at least cc one HIV-1 type 0 antigen, a nucleic acid encoding such an antigen, cr a virus-like particle comprising such an antigen, or an attenuated comprise of an HIV-1 type 0 strain. The invention also relates to new cr Tchaad, Nigeria, Senegal and Niger.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New isolated HIV-1 group O strains - used to produce polynucleotides, antigens and antibodies for use in diagnosis and vaccines for prevention of HIV-1 infection {\bf r}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-132255/11.
N-PSDB; AAX25180.
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                                                                                                                                                                                                                                                                             HIV-1 group O isolate MP331 (FABA) Vpu protein
                                                                                                                                                                                                                                                                                                               19-JUL-1999
                                                                                                                                                                                             Human immunodeficiency virus type 1.
                                                                                                                                                                                                                                              HIV-1 group 0;
                                                                                                                                                                                                                                                                                                                                            AAY05637;
                                                                                                                                                                                                                                                                                                                                                                              AAY05637 standard; Protein; 85
 Delaporte E,
                                (INNO-) INNOGENETICS NV
                                                                  18-JUL-1997;
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                                                                                                                                                                                                                             vaccine;
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les 6; Conserv
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                                                                                                                                                                                                                               diagnosis;
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 Peeters M,
                                                                                                                                                                                                                               Outlier strain; polymerase; Vpu osis; AIDS.
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                                                                  97EP-0870110
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   Saman
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Pred.
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     Vanden Haesevelde
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57;
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                                                                                                                                                                                                                                                protein; antigen;
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RESULT 11
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Matches 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and the use of these antigens, or nucleic acids encoding them (see AXX25154-80), in the diagnosis and prophylaxis of AIDS. They can bused as reagents for detecting HIV-1 group O infection and for differentiating different types of HIV-1 group O infection and for vaccines that provide protective immunity against HIV-1 infection, in particular against HIV-1 group O infection, comprise at least one HIV-1 type O antigen, a nucleic acid encoding such an antigen, a virus-like particle comprising such an antigen, or an attenuated form of an HIV-1 type O strain. The invention also relates to new HIV-1 group O strains, obtained from patients from Cameroon, Gabon, Tchaad, Nigeria, Senegal (such as MF331) and Niger.
                                                                       New isolated nucleic acid
genes from Drosophila and
                                                                                                                                                       N-PSDB;
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11-JUL-2000;
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                                                                                                                                                                                                                                  Venter
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                                                                                                                                                                                                                                                                                  (PEKE )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   pharmaceutical.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Drosophila; developmental biology; cell signalling; insecticide;
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DB; ABL05392.
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DB; AAX25181.
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                                                                     detection reagent for detecting 1000 or more for elucidating cell signalling and cell-cell
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Disclosure;

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RESULT 12
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Best Local
     The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABLIGIT6-ABLIGIT), expressed DNA sequences (ABLIGIT6-ABLIGIT), expressed DNA (ABBS7737-ABB72072).

The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIFC at fire wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                           New isolated nucleic a genes from Drosophila interactions -
                                                                                                                                                                                                                                                                  WPI; 2001-656860/75.
N-PSDB; ABL15217.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL10167-ABL30511), expressed DNA sequences (ABL010840-ABL16175) and the encoded proteins (ABB57737-ABB72072).
                                                                                                                                                                             Disclosure; SEQ ID NO 40134; 21pp + Sequence Listing; English
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11-JUL-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Drosophila melanogaster polypeptide SEQ ID NO 40134
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97
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Pred. No.
                                                                                                                                                                                                                                                                                                             Myers EW;
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RESULT 13
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CC designated ORF (open reading frame) 1-4534, and sequences ABP31028-ABP35561 represent 4534, and sequences ABN75054-
CC ABN79587 represent cDNAs encoding them. The invention also encompasses
CC open at least 80% identical to the ORF1-ORF4534 (collectively
CC referred to as ORFX) proteins, polynucleotides at least 85% identical to
CC oplynucleotides the recombinant production of ORFX proteins, antibodies
CC oplynucleotides, the recombinant production of ORFX proteins, antibodies
CC specific for ORFX proteins, methods of detecting ORFX polynucleotides and
CC oplypeptides, methods of screening for modulators of ORFX expression or
CC activity, and methods of screening individuals for a predisposition to an
CC orange of biological activities, such as cytokine, cell proliferation,
CC cell differentiation, immune modulation, haematopoiesis regulation,
CC tissue growth, angiogenesis, activin or inhibin activity, chemotactic/
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Best Local
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                                                                                                                                                                                                                                                                                                      Novel human polypeptides and polynucleotides useful for diagnosing, preventing and treating cardiovascular disease, neurodegenerative, hyperproliferative disorders and disorders related to organ transplantation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; ORF; open reading frame; ORFX; drug screening; diagnosis;
disease monitoring; cytokine; cell proliferation; cell differentiation;
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                                                                                                                                                                                                                                                                      Claim
                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-106200/14.
N-PSDB; ABN77744.
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Pred. No.
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RESULT 14
AAY86013
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밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cc and antiinfective activity, and may also be involved in the determination cc and antiinfective activity, and may also be involved in the determination cc of bodily characteristics, fertillty and behaviour. ORFX proteins, cc nucleic acids and antibodies may be used in the treatment of cancers, co ther proliferative disorders such as psoriasis and benign tumours, cc neurological disorders such as epilepsy and Alzheimer's disease, cc cardiovascular diseases, immune system disorders, disorders related to cradiovascular diseases, immune system disorders, disorders related to cradiovascular diseases, influence system disorders and regeneration, cc diseases such as diabetes mellitus, hypothyroidism, and cholesterol ester cf ungal and other pathogens. ORFX nucleic acids may also be used as a cc source of primers and probes, in the detection of ORFX genomic sequences corrected to generate dispussis, and in forensic biology. The ORFX nucleic acids may additionally be used to produce transgenic animals corrected as any additionally be used to produce transgenic animals corrected as a corrected and in drug screening. The ORFX proteins may also be used as immunogens to generate specific antibodies, which are useful in the cc diagnosis, treatment and monitoring of ORFX-associated diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  receptor/ligand, antiinflammatory activity,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 chemokinetic activity,
                                                                                                                                                                                                                                                                                                                                                                                                                     Treatment; prevention; disease; diagnosis; gene therapy; screening; bacterial; antimicrobial; antibiotic; pathogenesis; infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S. pneumoniae derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAY86013;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                          Streptococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAY86013 standard;
                                                                                                                Streptococcus pneumoniae proteins and screening compounds for antibacterial
                                                                                                                                                         WPI; 1998-159452/14.
N-PSDB; AAZ96350.
                                                                                                                                                                                                                   Black MT,
                                                                                                                                                                                                                                                                                                                                   19-FEB-1998
                                                                                                                                                                                                                                                                                                                                                               WO9806734-A1
                                                                                     Claim
                                                                                                                                                                                                                                                                        16-AUG-1996;
                                                                                                                                                                                                                                                                                                    15-AUG-1997;
                                                                                                                                                                                                                                             (SMIK ) SMITHKLINE BEECHAM CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EQEIRDL 7
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6; Conser
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                                                                                                                                                                                                                                                                                                                                                                                          pneumoniae.
                                                                                     501-502; 640pp;
                                                                                                                                                                                                                                                                        96US-0024022
                                                                                                                                                                                                                                                                                                       97WO-US14436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Protein;
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85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein
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                                                                                                                                                                                                                   Knowles DJC,
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Pred.
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                                                                                     English.
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                                                                                                                               related DNA - useful
                                                                                                                                                                                                                   Lonetto MA,
                                                                                                                   activity
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tumour inhibition
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This invention describes novel isolated Streptococcus pneumoniae polynucleotides (see AAZ96173-Z96494) and their encoded proteins (see AAX85792-Y86182). The DNA, vectors and host cells described in the method of the invention are useful for the recombinant expression of the method of the invention are useful for treatment or prevention of

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RESULT 15
AAG37575
AC AAU37
XX AAU37
XX
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Best Local :
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23-MAY-2000; 2000US-206848P.
26-MAY-2000; 2000US-207727P.
23-OCT-2000; 2000US-242578P.
27-NOV-2000; 2000US-253625P.
22-DEC-2000; 2000US-257931P.
The invention relates to antisense inhibitors of genes essential to prokaryotic cellular proliferation, their use in identifying the genes, their use in the discovery of novel antibiotics, the essential genes themselves and the encoded proteins. The prokaryotes used are Escherichia coli, Staphylococcus aureus, Salmonella typhi, Klabsiella pneumoniae, Pseudomonas aeruginosa and Enterococcus faecalis. The invention is also useful for the identification of potential new targets for antibiotic development. The antisense nucleic acids can also be used to identify proteins used in proliferation, to express these proteins, and to obtain antibodies capable of binding to the expressed proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Haselbeck R,
Yamamoto RT,
                                                                                                                                                                                                                                                                                                                                      Example 3; Seq ID No 13168; 511pp; English.
                                                                                                                                                                                                                                                                                                                                                                                              New polynucleotides for the identification and development antibiotics, comprise sequences of antisense nucleic acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-SEP-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Streptococcus pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antisense; prokaryotic cellular proliferation protein; antibiotic; antibacterial; drug design.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             disease, or diagnosis of disease related to expression or activity of such a polypeptide. They can also be used to screen for compounds which interact with and inhibit or activate such a polypeptide. The polypeptides (or DNA encoding them, via gene therapy) are also useful for inducing an immunological response in a mammal. The antagonists are useful to inhibit such bacterial polypeptides. The polypeptides are particularly useful to identify antimicrobial compounds and antibiotics. They are also useful to determine their role in pathogenesis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Streptococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ELIT-) ELITRA PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-MAR-2001; 2001WO-US09180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-FEB-2002
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16-FEB-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                infection,
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mes 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001-611495/70.
DB; AAS55434.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   dysfunction and disease.
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Xu HH;
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85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Zyskind JW, Wall D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 32; DB 19;
Pred. No. 1.1e+02;
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В
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                                                                                                                                 888888888888
                                                                  Matches
                                                                               Query Match
Best Local :
                                                                                                                                                                      The proteins can be used to screen compounds in rational drug discovery programmes. The antisense nucleic acid sequence is also useful to screen for homologous nucleic acids which are required for cell proliferation is a wide variety of organisms. The present sequence represents an essential prokaryotic cellular proliferation protein. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
   111
                                                                                                                                Sequence
                                                                                                                                                            ftp.w1po.int/pub/published_pct_sequences.
                                 1 EQEIRDL 7
EQEIRDI 117
                                                               6,
                                                                                 Similarity
                                                                                                                              183 AA;
                                                                Conservative
                                                                              82.1%;
85.7%;
                                                                              Score 32; DB 22;
Pred. No. 1.9e+02;
                                                                Mismatches
                                                                0
                                                                                           Length 183;
                                                               Indels
                                                             0
                                                                                                                                                                                                                                                                        to screen
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Search completed: November 13, 2002, 13:22:12 Job time: 40.6596 secs

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Minimum DB
Maximum DB
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ŏ.
      275223335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    seq (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    length: 0
length: 2000000000
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Match
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Gapop 10.0 , Gapext 0.5
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39
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 EQEIRDLR 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GenCore version 5.1.3
Copyright (c) 1993 - 2002 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /cgn2_6/ptodata/1/1aa/5A_COMB.pep:*
/cgn2_6/ptodata/1/1aa/5B_COMB.pep:*
/cgn2_6/ptodata/1/1aa/6A_COMB.pep:*
/cgn2_6/ptodata/1/1aa/6B_COMB.pep:*
/cgn2_6/ptodata/1/1aa/FCTUS_COMB.pep:*
/cgn2_6/ptodata/1/1aa/backfiles1.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
    US-08-475-989-5
US-08-472-172-17
US-08-256-839-5
US-08-475-989-15
US-08-475-989-15
US-08-475-989-15
US-08-475-989-15
US-08-475-989-15
US-08-475-989-15
US-08-475-985-15
US-08-256-839-15
US-09-362-336A-15
US-09-362-336A-15
US-09-111-470-8
US-07-803-622E-9
US-08-985-910-401-3
US-09-610-401-3
US-09-610-401-3
US-09-610-401-3
US-09-610-401-3
US-09-610-401-3
US-08-889-628-74
US-08-899-628-74
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Search time 11.5745 Seconds (without alignments)
20.336 Million cell updates/sec
                 Sequence 5, Appli
Sequence 17, Appli
Sequence 17, Appli
Sequence 18, Appli
Sequence 15, Appli
Sequence 15, Appli
Sequence 15, Appli
Sequence 15, Appli
Sequence 7, Appli
Sequence 2, Appli
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      Sequence
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Patent No.
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	45	44	43	42	41	40	39	38	37	36	35 5	34	33	32	31	30	29	28
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	US-08-471-044-40	US-08-471-033-43	US-08-471-033-40	US-09-218-197-2	US-09-134-001C-3769	US-09-012-871-6	US-09-159-417-2	US-08-953-041-2	US-08-843-521-6	US-08-726-306A-168	US-09-562-737-112	US-08-936-165A-349	US-09-106-568E-152	5206163-3	US-08-684-932A-38	US-09-723-429-2	US-09-723-153-2	US-09-634-957-2
,	-	Sequence 43, Appl	Sequence 40, Appl	Sequence 2, Appli	Sequence 3769, Ap	Sequence 6, Appli	Sequence 2, Appli	Sequence 2, Appli	Sequence 6, Appli	Sequence 168, App		•	Sequence 152, App	Patent No. 5206163	Sequence 38, Appl	Sequence 2, Appli	Sequence 2, Appli	Sequence 2, Appli

ALIGNMENTS

Sequence 5, Application US/08475989
Patent No. 5673323
GENERAL INFORMATION:
APPLICANT: CHONG, Pelle
APPLICANT: KANDIL, All
APPLICANT: WANDING Synthetic Haemophilus Influenzae
ITITLE OF INVENTION: 390 University Avenue
STREET: Statte 701, 330 University Avenue
STRATE: Ontario
CONTRY: Conada
ITITLE MESCRI: Ploppy disk
COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
MEDIUM TYPE: BLOPPy disk
COMPUTER READABLE FORM:
MEDIUM TYPE: DATE: 03-768-19.05

COMPUTER READABLE FORM:
MEDIUM TYPE: DATE: 03-768-19.3

FILING DATE: 03-768-19.3

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Query Match
Best Local Similarity barrantive
Stranger Str
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Best Local Similarity 62.5%;
Matches 5; Conservative
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                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: (416) 595-11:
TELEFAX: (416) 595-1163
:NFORMATION FOR SEQ ID NO: (500)
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 24,973
TELECOMMUNICATION INFORMATION:
TELEPHONE: (416) 595-1155
TELEPAX: /416
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: DM PC COMPATION
OPERATING SYSTEM: PC-COS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NATA:
APPLICATION NUMBER: GB 9202219.3
FILING DATE: 03-FEB-1992
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: STEWART, MICHAEL I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/475,985
FILING DATE: 07-JUN-1995
CLASSIFICATION: 424
                                                                                                                                                                                                                                                                    LENGTH: 29 amino acids TYPE: amino acid STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: PCT/CA93/00041 FILING DATE: 03-FEB-1993 CLASSIFICATION: 424
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STRANDEDNESS: single
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STREET: Sulte 701, 330 University Avenue
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                                                                                      74.48;
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                                                    Score 29; DB
Pred. No. 27;
2; Mismatches
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RESULT 3
US-08-472-172-17
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US-08-472-172-17
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                                      Query Match
Best Local Similarity b2...
Thes 5; Conservative
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                                                                                                                                                                                                  TELEFAX: (416) 595-116
TELEX: 063-24567 SIMBA
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/472,172
FILING DATE: 07-JUN-1995
CLASSIFEICATION : 435
PRIOR APPLICATION NUMBER: US 07/849,411
FILING DATE: 07-JUL-1992
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: Canada
ZIP: M5G 1R6
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PATENTIN NO. CURRENT APPLICATION DATA:
CURRENT APPLICATION NUMBER: US/08/472,172
                                                                                                                                                                                                                                                                   TELEPHONE: (416) 595-1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IIILE OF INVENTION: Outer Membrane Protein P1 and Peptides
IIILE OF INVENTION: of Haemophilus Influenzae Type B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: Suite
CITY: Toronto
STATE: Ontario
                                                                                                                                                       LENGTH: 29 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                     NAME: Stewart, Michael I REGISTRATION NUMBER: 24973 REFERENCE/DOCKET NUMBER: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                     LENGTH:
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                1 EQEIRDLR 8 : | | | | | | |
5 QQEFRDLK 12
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Chong, Pele Y Y
Fahlm, Raafat
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Klein, Michel
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                                                                                                                                          linear
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                                                                              74.48;
                                                             Score 29; DB 2; Pred. No. 27; 2; Mismatches
                                                                                                                                                                                                                                                                                                          1038-471
                                                                                         Length 29
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Sequence 5, Application US/08256839
Patent No. 6018019
GENERAL INFORMATION:
APPLICANT: CHONG, Pele
APPLICANT: KANDIL, All
APPLICANT: SIA, Charles

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Best Local
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                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LBM PC compatable
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/750,624
FILING DATE: 26-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 29 amino acids
TYPE: amino acid
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MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 10
TELECOMMUNICATION INFORMATION:
TELEPHONE: (416) 595-1155
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                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS
TTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                               PPLICANT: Chong, Pele
PPLICANT: Klein, Michel H
TITLE OF INVENTION: ADJUVANT COMPOSITIONS COMPRISING A
TITLE OF INVENTION: MINERAL SALT AND ANOTHER IMMUNOSTIMULATING COMPOUND
                                                                                                                                                                                                                                                       UMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                              PPLICANT: Kandil, Ali
PPLICANT: James, Olive A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: STEWART, MICHAEL I
REGISTRATION NUMBER: 24,9
                                                                                                                                                                            CITY: Toronto
STATE: Ontario
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                                                                                                                                                 COUNTRY: Canada
ZIP: M5G 1R7
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               SIFICATION:
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M5G 1R7
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                                                                                                                                                                                                             6th Floor,
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h Floor, 330 University Avenue
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ite 701, 330 University Avenue
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NO: 5:
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Pred. No.
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Thes 5; Conserve
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                                                                                                                                                                                        US-08-475-989-15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 160
SOFTWARE: Microsoft Word 97
SEQ ID NO 160
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Suvarna, Kalavati
APPLICANT: Bhattacherjee, Vasker
TITLE OF INVENTION: METHODS AND REAGENTS FOR DETECTING FUNGAL PATHOGENS
TITLE OF INVENTION: A BIOLOGICAL SAMPLE
FILE REFERENCE: 96.247-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/106,568E CURRENT FILING DATE: 1998-06-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (416) 595-116
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 35 amino acids
                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 08/PRIOR FILING DATE: 1997-05-20
                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 37
TYPE: PRT
ORGANISM: Artificial sequence
                                                                                                                                                            tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 10
TELECOMMUNICATION INFORMATION:
                           IPPLICANT: ALEIN, Michel
RITILE OF INVENTION: Synthetic Haemophilus Influenzae
RITILE OF INVENTION: Conjugate Vaccine
RITILE OF SEQUENCES: 56
                                                                                                                 APPLICANT: CHONG, APPLICANT: KANDIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 62. hes 5; Conservative
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5 EREVRDL 11
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             DRESSEE:
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                                                                                                                                                              5, Application US/08475989 5679352
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E: Sim & McBurney
Suite 701, 330 University Avenue
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                                                                                                     SIA, Charles
                                                                                                                 KANDIL, Ali
                                                                                                                                                                                                                                                                                                            Conservative
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                                                                                                                                                                                                                                                                                                                                                                                 Polypeptide segment of LYS2_SCER shown in Figure 4.
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Pred. No.
                                                                                                                                                                                                                                                                                                                          Score 29;
Pred. No.
                                                                                                                                                                                                                                                                                                              Mismatches
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APPLICATION NUMBER:

σs/08/475,985

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Query Match
Best Local Similarity
Tatches 5; Conserve
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
COUNTRY: Canada
ZIP: M5G 1R7
ZIP: M5G 1R7
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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LENGTH: 39 amino acids
                                                                                                                                                                                                                                       APPLICANT: KLEIN, Michel
TITLE OF INVENTION: Synthetic Haemophilus Influenzae
TITLE OF INVENTION: Conjugate Vaccine
NUMBER OF SEQUENCES: 56
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APPLICATION NUMBER: (
FILING DATE: 03-FEB-
CLASSIFICATION: 424
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ZIP: M5G 1R7
COMPTTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                 APPLICANT:
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PRIOR APPLICATION DATA:
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APPLICATION NUMBER: PCT/CA93/00041
FILING DATE: 03-FEB-1993
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                                                                                                                                                   STREET: Sulte CITY: Toronto STATE: Ontario
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 39 amino acids
TYPE: amino acid
STRANDEDNESS: single
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
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REFERENCE/DOCKET NUMBER: 1038-505 MIS:vg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: GB 9: FILING DATE: 03-FEB-1992 CLASSIFICATION: 424
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Sulte 701, 330 University Avenue
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SIA, Charles
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Pred. No. 37;
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RESULT 9
US-08-256-839-15
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US-08-475-985-15
COMPUTER: IBM PC COMPARTIBLE
COMPUTER: IBM PC COMPARTIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PACENTIN Release #1.0, Version #1.25
SOFTWARE: PACENTIN DATA:
APPLICATION NUMBER: US/08/256,839
FILING DATE:
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: STEWART, MICHAEL I.
REGISTRATION NUMBER: 24,973
REFERENCE/DOCKET NUMBER: 1038-373 MIS:Jb
TELECOMMUNICATION INFORMATION:
TELEPHONE: (416) 595-1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent No.
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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APPLICANT:
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REGISTRATION NUMBER: 24,973
REFERENCE/DOCKET NUMBER: 10:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (416) 595-1155
                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Synthetic Haemophilus Influenzae TITLE OF INVENTION: Conjugate Vaccine NUMBER OF SEQUENCES: 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 9202219.3
FILING DATE: 03-FEB-1992
CLASSIFICATION: 424
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Local Similarity 62.58;
es 5; Conservation
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FILING DATE: 03-FEB-1993
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CANT: CHONG, Pele
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M5G 1R7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      KANDIL, Ali
SIA, Charles
KLEIN, Michel
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linear
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Pred. No. 37;
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; TYPE: PRT
; ORGANISM: Homo sapiens
; EEATURE:
; OTHER INFORMATION: residues 963-1027 of GenBank Accession no.
US-09-362-336A-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-362-336A-15
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Best Local :
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patent No. 6440696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER:
CURRENT FILING DATE: 1999-C
NUMBER OF SEQ ID NOS: 17
SOFTWARE: PATENTIN VEI. 2.1
1EQ ID NO 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Band, Vimla
APPLICANT: Gao, Qingshen
TITLE OF INVENTION: No. 64406966
FILE REFERENCE: 18475-017, E6TPJ
                                                                                                                                                                                                                                                                                                  squence 8, April
No. 6277959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (416) 595-1163
NFORMATION FOR SEQ ID NO: 15:
                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
          ZIP: 94304-1104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 39 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                            NERAL INFORMATION:
                                                                                                                                            CORRESPONDENCE ADDRESS
                                                                                                                                                                         TITLE OF INVENTION: Mammalian Membrane Protein Genes;
                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                           TUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 62.
                                                                                                   CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                               41 EEEVRSLR 48
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les 5; Conserv
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                                                                     COUNTRY:
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                                                                                    California
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                                                                                                                 901 California Avenue
                                                                        USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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                                                                                                                                                                                                                     Saeland, Sem
                                                                                                                                                                                                                                                                           Valladeau, Jenny
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PC-DOS/MS-DOS
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Pred. No.
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Best Local Similarity
Matches 6; Conserv
                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: WAIDLITY, RICHARD J.
REGISTRATION UNMER: 32,327
REFERENCE/DOCKET NUMBER: 195/
TELECOMMUNICATION INFORMATION:
TELEPHONE: 213-489-1600
TELEFAX: 213-955-0440
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                                                                                       INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tent No.
                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: APPLICANT:
MOLECULE TYPE:
                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 375 amino acid
                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
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TELECOMMUNICATION INFORMATION:
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APPLICATION NUMBER: US 60/053,080
FILING DATE: 09-JUL-1997
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APPLICANT: Martin, Georges
APPLICANT: Wahle, Elmar
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31 EKPIRDLR 38
                                                                                                                                                                                                                                              APPLICATION NUMBER: US/0 FILING DATE: 27-NOV-1991 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
ZIP: 90017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Los Angeles
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                                                  375 amino acids
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611 West Sixth Street
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                linear
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08-JUL-1998
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Pred. No.
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JEFFERSON DAVIS HIGHWAY, FOURTH FLOOF

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Matches: 4; Conserv
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                                                                                     Sequence 24, Application US/08985908 Patent No. 6004773
                                                                    GENERAL INFORMATION:
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/803,63
            APPLICANT: MASAYUKI ARAKI, MASAKAZU SUGIMOTO, YASUHIKO YOSHIHARA, ÄND TSUYOSHI NA
TITLE OF INVENTION: METHOD FOR PRODUCING L-LYSINE
NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
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CLASSIFICATION: 435
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REGISTRATION NUMBER: 3:
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611 West Sixth Street
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Martin, Georges
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SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C
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Pred. No.
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Pred. No. 3
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                  SEQUENCE CHARACTERISTICS
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US-08-985-908-24
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NFORMATION FOR SEQ ID NO:
TELEFAX: 415-85
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acids
TYPE: amino acid
TOPOLOGY: 11---
(OLECTION)
                            REFERENCE/DOCKET NUMBER: PF
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-855-0555
                                                                                                 APPLICATION NUMBER: US/08/6:
FILING DATE: Filed Herewith
ATTORNEY/AGENT INFORMATION:
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MEDIUM TYPE: Diskett
COMPUTER: IBM Compat
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                                                                                                                                                 SOFTWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA:
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ATTORNEY/AGENT INFORMATION:
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les 5; Conserv
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                                                                                                                                                                           OPERATING SYSTEM:
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ZIP: 94304
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FILING DATE: 05-DEC-1996
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                                                                        NAME: Luther, Barbara
REGISTRATION NUMBER: 3
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                                                                                                                                                                                                                                                                                     Palo Alto
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/08650275
                                                                                                                                                                                                                                                                                                   E: Incyte Pharmaceuticals, Inc. 3174 Porter Drive
                                                                                                                                                                                                                                                         U.S.
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                                                                                                                                                                                           IBM Compatible
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SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                              Diskette
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 ID NO:
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Pred. No.
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TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
IMMEDIATE SOURCE:
LIBRARY: LUNGNOTO4
CLONE: 809200
US-08-650-275-2
Query Match
Best Local Similarity 100.0%; Pred. No. 3.8e+02;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Seps 0;
Search completed: November 13, 2002, 13:18:09
Job time: 11.5745 secs
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Result
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Maximum DB
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Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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/cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*
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0 US-09-815-242-10580

0 US-09-924-358-8
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US-09-764-864-876
US-09-925-300-1381
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US-09-815-242-13411
US-09-815-242-13608
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                                                                                                                                                              Sequence 13171, A
Sequence 309, App
Sequence 8, Appli
Sequence 74, Appl
Sequence 155, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Description
                    Sequence 3, Appli
Sequence 4, Appli
Sequence 4973, Ap
Sequence 10580, A
Sequence 8, Appli
                                                                                                                                                                                                                                                                               Sequence 8, Appl1
Sequence 13171,
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Sequence 13411, A
Sequence 13608, A
Sequence 12049, A
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876, App
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                                                                                   ; ORGANISM: Streptococcus pneumoniae US-09-815-242-13168
Query Match
Best Local Similarity
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5. US20020061569A1
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Zyskind, Judith W.
Wall, Daniel
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82.1%;
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ALIGNMENTS

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PRIOR APPLICATION NUMBER: 60/191.078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206.848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207.727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/242.578
PRIOR FILING DATE: 2000-10-23
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253.625
PRIOR FILING DATE: 2000-11-27
PRIOR FILING DATE: 2000-11-27
                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
NUMBER OF SEQ ID NOS: 14110
SOFTWARE: FBStSEQ for Windows Version 4.0
SEQ ID NO 13168
LENGTH: 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/815,242
CURRENT FILING DATE: 2001-03-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: Identification of Essential Genes
TITLE OF INVENTION: Prokaryotes
FILE REFERENCE: ELITRA.011A
                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/257,931 FILING DATE: 2000-12-22
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No.
DB
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                                Length 183;
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US-09-764-864-876
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Best Local Similarity /J...
Grands 6; Conservative
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NUMBER OF SEO ID NOS: 1792
SOFTWARE: PatentIn Ver. 2.0
SEO ID NO 876
LENGTH: 631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 876, Application US/09764864 Patent No. US20020132753A1
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                                 Best Local
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SEQ ID NO 1381
LENGTH: 618
                                                     Query Match
Best Local
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APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PT223
CURRENT APPLICATION NUMBER: US/09/764,864
CURRENT FILING DATE: 2001-01-17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-925-300-1381
                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1999-03-12
NUMBER OF SEQ ID NOS: 1890
                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/925,300
CURRENT FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: PCT/US00/05988
PRIOR FILING DATE: 2000-03-08
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                                                                                                                                                                                            OTHER INFORMATION:
NAME/KEY: SITE
LOCATION: (524)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   quence 1381, Application US/09925300 tent No. US20020151681A1
                                                                                                                                                                        OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
                                                                                                                                                                                                                                              NAME/KEY: SITE
LOCATION: (507
                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                              ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            149 EQEIRELQ 156
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                                    Similarity
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                                        Conservative
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62.58;
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Pred. No. 66;
                                    Score 30; DB 10;
Pred. No. 1e+02;
3; Mismatches (
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LENGTH: 66
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                                                                       PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR PPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/191,078 PRIOR FILING DATE: 2000-03-21 PRIOR APPLICATION NUMBER: 60/191,078 PRIOR APPLICATION NUMBER: 2000-03-21
                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Identification of Essential Genes in TITLE OF INVENTION: Prokaryotes FILE REFERENCE: ELITRA.011A
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SOFTWARE: FastSEQ for
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                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/815,242
CURRENT FILING DATE: 2001-03-21
                                        NUMBER OF SEQ ID NOS: 14110
SOFTWARE: FastSEQ for Windows Version 4.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      quence 13411, Application US/09815242
tent No. US20020061569A1
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299 EEEMKDLR 306
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                                                                                                                                                                                                               APPLICATION NUMBER: 60/206,848
FILING DATE: 2000-05-23
APPLICATION NUMBER: 60/207,727
FILING DATE: 2000-05-26
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FILING DATE: 2000-10-23
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S20020058335A1
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Zyskind, Judith W.
Wall, Daniel
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Kumble, Anand
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Onrust, Rene
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, Matthew
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62.58;
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US-09-815-242-12049
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SEQ TH: 1179
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CURRENT FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR APPLICATION NUMBER: 60/253,625
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Best Local :
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                                                                                              GENERAL INFORMATION:
                                                                                                           Sequence 12049, Application US/09815242 Patent No. US20020061569A1
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                                                              APPLICANT:
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NITLE OF INVENTION: Prokaryotes
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964 EQEVKDL 970
                                                                                                                                                                                                                                                                76.9%;
Local Similarity 71.4%;
hes 5; Conservative
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5. US20020061569A1
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                                                                             Haselbeck, Robert
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                       Ohlsen, Kari L.
Zyskind, Judith W.
Wall, Daniel
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Zyskind, Judith W.
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Carr, Grant J.
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Xu, H. Howard
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             Trawick, John D.
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Pred. No.
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Query Match
Best Local Similarity
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Sequence 8, Application US/09862802
Patent No. US20020165346A1
GENERAL INFORMATION:
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                                                                                                                                 ; OTHER INFORMATION: mammalian protein US-09-862-802-8
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SOFTWARE: Patentin version 3.1
SEQ ID NO 8
LENGTH: 238
TYPE: PRT
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Best Local Similarity
Matches 5; Conserv
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LENGTH: 65
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CURRENT FILING DATE: 2002-01-10
                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Schering-Plough Corporation
TITLE OF INVENTION: MAMMALIAN MEMBRANE PROTEIN GENES; RELATED REAGENTS
FILE REFERENCE: SF0695B
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PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
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                                                                                                                                                                 ORGANISM: unknown FEATURE:
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1 EQEIRDLR 8
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31 EKPIRDLR 38
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APPLICATION NUMBER: 60/257,931
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                                                                 Conservative
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75.0%;
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Pred. No.
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Pred. No.
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                                                                 Indels
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RESULT 9 US-09-615-242-13171 ; Sequence 13171, Application US/09815242 ; Patent No. US20020061569A1

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RESULT 10
US-09-978-295A-309
US-09-978-295A-309
; Sequence 309, Application US/09978295A
; Patent No. US20020156006A1
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Best Local Similarity 85.7
Matches 6; Conservative
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SEQ ID NO 13171
LENGTH: 398
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PRIOR FILING DATE: 2001-02-16
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URRENT FILING DATE: 2001-03-21
FIOR APPLICATION NUMBER: 60/191,078
FRIOR FILING DATE: 2000-03-21
FRIOR APPLICATION NUMBER: 60/206,848
FRIOR FILING DATE: 2000-05-23
FRIOR FILING DATE: 2000-05-23
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ITLE OF INVENTION: Identification of Essential Genes
ITLE OF INVENTION: Prokaryotes
ILE REFERENCE: ELITRA.011A
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APPLICATION NUMBER: 60/242,578
FILING DATE: 2000-10-23
APPLICATION NUMBER: 60/253,625
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LING DATE: 2000-12-22
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Baker Kevin P.
Botstein, David
Desnoyers, Luc
Pan, James;
Paoni, Nicholas E.
Roy, Margaret Ann
Shelton, David L.
                                                                                                                     Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J
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Goddard, Audrey
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Filvaroff, Ellen
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                                                                     Napier, Mary A.
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amamoto, Robert T.
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ck, John D.
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Judith W.
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Pred. No.
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FILE REFERENCE: P2630P1C11
CURRENT APPLICATION NUMBER: US/09/978,295A
CURRENT FILING DATE: 2001-10-15
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PRIOR FILING DATE: 2001-07-30
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ITTLE OF INVENTION: Acids Encoding the Same
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OR APPLICATION NUMBER: 60/080328
OR FILING DATE: 1998-04-01
OR APPLICATION NUMBER: 60/080333
OR APPLICATION NUMBER: 60/080333
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FILING DATE: 1998-03-10
APPLICATION NUMBER: 60/077632
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FILING DATE: 1998-04-01
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APPLICATION NUMBER:
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FILING DATE: 1997-11-21
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APPLICATION NUMBER: 60/079663
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OR FILING DATE 1998-05-05
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OR FILING DATE: 1998-05-06
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OR FILING DATE: 1998-05-06
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APPLICATION NUMBER: 60/084640 FILING DATE: 1998-05-07 APPLICATION NUMBER: 60/084598
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APPLICATION NUMBER: 60/083558
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FILING DATE: 1998-04-29
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FILING DATE: 1998-04-29
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FILING DATE: 1998-04-28
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RESULT 11
US-09-765-205-8
US-09-765-205-8
; Sequence 8, Application US/09765205
; Patent No. US20020034800A1
; GENERAL INFORMATION:
RESULT 12
US-09-866-572A-74
US-09-866-572A-74
; Sequence 74, Application US/09866572A
; Patent No. US20020138859A1
; GENERAL INFORMATION:
; APPLICANT: Croteau, Rodney et al.
                                                                                                                                                                                                                                                                                                                   ; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: FASTSEQ for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 406
; TYPE: PRT
; ORGANISM: human
US-09-765-205-8
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TITLE OF INVENTION: BONE MARROW SECRETED PROTEINS
FILE REFERENCE: 1458.004/200130.449
CURRENT APPLICATION NUMBER: US/09/765,205
CURRENT FILING DATE: 2001-01-17
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OR APPLICATION NUMBER: 60/084600
OR PETLING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084627
OR FILING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/084643
OR FILING DATE: 1998-05-07
OR APPLICATION NUMBER: 60/085339
OR FILING DATE: 1998-05-13
OR APPLICATION NUMBER: 60/08538
OR FILING DATE: 1998-05-13
OR APPLICATION NUMBER: 60/085323
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OR FILING DATE: 1998-05-15
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OR APPLICATION NUMBER: 60/085689
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FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085580
FILING DATE: 1998-05-15
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Similarity 100.0%; Pred.
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US-09-923-779-155
US-09-923-779-155
Sequence 155, Application US/09923779
Patent No. US20020076721A1
GENERAL INFORMATION:
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US-10-152-647-3
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CURRENT FILING DATE: 2001-08-06
NUMBER OF SEQ ID NOS: 155
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 155
LENGTH: 466
TYPE: PRT
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PRIOR FILING DATE: 1999-12-07
NUMBER OF SEQ ID NOS: 74
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 74
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Best Local :
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Patent No. US20020137110A1
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                                                                                                                                                  FILE REFERENCE: 522.1004
CURRENT APPLICATION NUMBER: US/10/152,647
CURRENT FILING DATE: 2002-55-21
                                                        SOFTWARE: PatentIn Ver. 2.0
EQ ID NO 3
                                                                                                                PRIOR APPLICATION NUMBER: US/09/610,401
                                                                                                                                                                                                                                                    APPLICANT: MORISHIMA, NO. US20020137110Aluhiro,
APPLICANT: NAKANISHI, Keiko,
                                                                                                    NUMBER OF SEQ ID NOS: 4
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CURRENT FILING DATE: 2001-05-25
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NPPLICANT: Kalos, Michael D.
NITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
NITLE OF INVENTION: AND DIAGNOSIS OF PANCREATIC CANCER
TILE REFERENCE: 210121.553
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TYPE: PRT
ORGANISM: Homo sapiens
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TLE OF INVENTION: Antibody against cleavage product of vimentin
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nes 5; Conserv
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Pred. No. 1
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Search completed: November 13, 2002, 13:40:20 Job time: 6.58967 secs
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                                                                                                                                                                                             SOFTWARE: Patent
SEQ ID NO 4
LENGTH: 466
TYPE: PRT
ORGANISM: Mus :
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Best Local Similarity 62...
Conservative
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Best Local Similarity
Matches 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 4, Application US/10152647 Patent No. US20020137110A1
                                                                                                                                                                                                                                                                             APPLICANT: SHIBATA, Takehiko
TITLE OF INVENTION: Antibody against cleavage product of vimentin
FILE REFERENCE: 522.1004
CURRENT APPLICATION NUMBER: US/10/152,647
CURRENT FILING DATE: 2002-05-21
PRIOR APPLICATION NUMBER: US/09/610,401
PRIOR FILING DATE: 2000-07-05
                                                                                                                                                                                                                                                                           NUMBER OF SEQ
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                                                            151 EEEMRELR 158
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                                                                                                                       Conservative
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Pred. No. 1.2e+02;
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Pred. No.
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Maximum Match 100%
Listing first 45 summaries
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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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/ Cgn2_6/ptodata/1/paa/US088_COMB.pep: *
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/ Cgn2_6/ptodata/1/paa/US092_COMB.pep: *
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US-09-791-537-92908

US-09-791-537-125497

US-10-205-331-57

US-09-611-526-3132

US-09-791-537-34475

US-09-791-537-56903
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34475, A
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	36			22	S-09-760-475-29	equence 2945, A
	36			21	S-09-791-537-325	Sequence 32570,
	36				-US02-31096-25	quence 25,
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	ω 5	9		2	S-09-791-537-4652	equence 46529,
	ω 5	9		21	S-09-791-537-73376	equence /33/6
	35	9		2	S-09-791-537-1208	equence 120809,
	35	9		21	S-09-791-537-1742	equence 17426,
	34	.7		25	S-10-155-881-2059	equence 20594,
	34	.7		27	S-60-207-316-110	equence IIU, Ap
	34	7		21	S-09-791-537-3655	equence soos,
	34	7.		21	S-09-791-537-7330	equence /3300,
	34	7.		21	S-09-791-537-2807	equence 20070,
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	34	7.	2	21	S-09-791-537-2805	equence Zouso,
	34	7.	8	21	S-09-791-537-478	equence 4/82, A
	34	7.	8	27	S-60-406-385-230	equence 230,
	34	7.	2	21	S-09-791-537-97	equence y/oyu,
	34	7	.0	27	S-60-203-511-1	equence I, Appr
	34	7	Η.	27	S-60-248-823-/1	equence /1/ App
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	ü	٠	85	18	S-09-462-917A-114	equence 114,
	33	۸	244	16	S-09-248-796-155	equence Loous,

ALIGNMENTS

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NUMBER OF SEQ ID NOS: 153055

SOFTWARE: PATENTIN VERSION 3.0

SEQ ID NO 92908

LENGTH: 542

TYPE: PRT

ORGANISM: Mus musculus

US-09-791-537-92908
                                                                                                                                                                                                                                                                                                                                                                         US-09-791-537-92908; Sequence 92908, Application US/09791537; GENERAL INFORMATION:
                                                             Query Match
Best Local Similarity
Matches 8; Conserv
                                                                                                                                                                                                                                                                        APPLICANT: Blonomix, Inc.
APPLICANT: Debe, Derek
APPLICANT: Denzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/791,537
140 EQEIRDLR 147
                  1 EQEIRDLR 8
                                                               Conservative
                                                                              100.0%;
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                                                               Score 39; DB 21;
Pred. No. 1.4e+02;
                                                                                               Length 542;
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Best Local Similarity
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Best Local Similarity
""" B; Conserv
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US-09-791-537-125497
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SEQ ID NO 125497
LENGTH: 542
TYPE: PRT
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GENERAL INFORMATION:
APPLICANT: Bionomix, Inc.
                                                                                                 GENERAL INFORMATION
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SOFTWARE: PatentIn Ver. 2
SEQ ID NO 57
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Sequence 57, A
                                                                                                                              -09-611-526-3132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/10/205,331
CURRENT FILING DATE: 2002-07-24
PRIOR APPLICATION NUMBER: GB 0118354.0
PRIOR FILING DATE: 2001-07-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBI
TITLE OF INVENTION: METHODS OF USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILE REFERENCE: 261/210
                                                              APPLICANT: OTA, TOSHIO APPLICANT: NISHIKAWA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Warner-Lambert Company
APPLICANT: Lee, Kevin
APPLICANT: Dixon, Alistair
APPLICANT: Brooksbank, Robert
APPLICANT: Pinnock, Robert
FITCANT: Pinnock, Robert
FITCE OF INVENTION: Identification and Use of Molecules Implicated in Pain
FILE REFERENCE: WL-A-018199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Rattus norvegicus FEATURE:
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TYPE: PRT
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                                                            NISHIKAWA, TETSUO
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ISHII, SHIZUKO
KAWAI, YURI
                             ISOGAI, TAKAO
HAYASHI, KOJI
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Pred. No.
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1.4e+02;
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   FILE REFERENCE:
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Query Match
Best Local Similarity
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                                                 US-09-791-537-56903; A)
                                                                                                                                                                                                                                                                           ; ORGANISM: Mus musculus US-09-791-537-34475
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SOFTWARE: PATENTIN VET. 2.1
SEQ ID NO 3132
LENGTH: 543
              GENERAL INFORMATION:
APPLICANT: Bionomix, Inc.
                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn
SEQ ID NO 34475
LENGTH: 543
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/791,537
                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY M
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: PRIMERS FOR SYNTHESIS OF FULL LENGTH CDNAS
TITLE OF INVENTION: AND THEIR USES
FILE REFERENCE: 08335/0122
CURRENT APPLICATION NUMBER: US/09/611,526
CURRENT FILING DATE: 2000-07-07
PRIOR APPLICATION NUMBER: JP 1999-194486
PRIOR FILING DATE: 1999-07-08
PRIOR FILING DATE: 1999-07-08
PRIOR FILING DATE: 1999-07-08
PRIOR FILING DATE: 1999-07-08
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APPLICANT: Debe, Derek
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SUGIYAMA, 1
Debe, Derek
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Pred. No.
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PPLICANT: Danzer, Joseph ITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY M ITLE OF INVENTION: METHODS OF USE THEREOF

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US-09-791-537-56903
                                                                                                   ) ORGANISM: Sus scrofa
US-09-791-537-125495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Homo sapiens
US-09-791-537-86802
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                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: PATENTIN VERSION 3.0
SEQ ID NO 125495
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Best Local
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SEQ ID NO 56903
LENGTH: 543
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APPLICANT: Dabe, Derek
APPLICANT: Dabe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBI
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: METHODS OF USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Bionomix, Inc.
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SURRENT APPLICATION NUMBER: US/09/791,537
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Local Similarity 100.0%;
hes 8; Conservative (
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mes 8; Conserva
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   1 EQEIRDLR 8
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                                                  Score 39;
Pred. No.
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Pred. No.
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                                                                                                           RESULT 11
US-60-207-216-737
; Sequence 737, Application US/60207216
; GENERAL INFORMATION:
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Best Local Similarity
Watches 8; Conserva
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                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Bos taurus
US-09-791-537-18635
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CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: PatentIn version 3.0
SEQ ID NO 18635
LENGTH: 555
TYPE: PRT
                                                APPLICANT: Beasley, I
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
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Best Local
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APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THEE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
FILE REFERENCE: 261/210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE
TITLE OF INVENTION: METHO
     CURRENT FILING DATE:
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les 8; Conserv
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   APPLICATION NUMBER: US/60/207,216 FILING DATE: 2000-05-26
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                                                                                                                                                                                                                                                                                      Conservative
                                  Ellen
ISOLATED HUMAN DRUG TARGET PROTEINS,
NUCLEIC ACID MOLECULES ENCODING HUMAN DRUG TARGET PROTEINS,
AND USES THEREOF
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Score 39; Pred. No.

1.4e+02; DB 21;

Length 555;

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NUMBER OF SEQ ID NOS: 153055
SOFTWARE: PatentIn version 3.0
SEQ ID NO 94465
LENGTH: 554
                                                                                                                                                                                                                                                                                          Sequence 94465, Application US/09791537 GENERAL INFORMATION:
                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/791,537
Conservative
                                                                                                                                                                                                                  THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME METHODS OF USE THEREOF
            100.0%;
            Score 39;
Pred. No.
                              DB 21;
            .4e+02;
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; FEATURE:
, NAME/KEY: VARIANT
; LOCATION: (1)...(229)
; OTHER INFORMATION: Xaa - Any Amino Acid
US-60-207-216-737
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TYPE: PRT
ORGANISM: Homo sapiens
US-09-760-475-2945
Query Match
Best Local Similarity
Watches 7; Conserv
                                                                           ; ORGANISM: Scyliorhinus stellaris US-09-791-537-32570
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US-09-791-537-32570
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Best Local Similarity 75.0
Conservative
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SEQ ID NO 32570
LENGTH: 455
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SOFTWARE: FastSEQ for
EQ ID NO 737
                                                                                                                                                                                 APPLICANT: Danzer, Joseph TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBITITLE OF INVENTION: METHODS OF USE THEREOF FILE REFERENCE: 261/210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
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CURRENT FILING DATE: 2001-01-16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Prior application data removed - consult PALM or file wrapper
NUMBER OF SEQ ID NOS: 4122
SOFTWARE: Patentin Ver. 2.0
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ORGANISM: HUMAN
                                                                                                                                                                                                                                                                                              PPLICANT: Bionomix, Inc.
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368 EQEVRDIR 375
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                Conservative
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Pred. No.
              Score 36; DB 21; Length 455;
Pred. No. 4.2e+02;
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Pred. No. 3.
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1.7e+02;
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PRIOR APPLICATION NUMBER: US 60/328,979
PRIOR FILING DATE: 2001-10-12
PRIOR APPLICATION NUMBER: US 60/346,034
PRIOR FILING DATE: 2001-10-19
PRIOR APPLICATION NUMBER: US 60/348,284
PRIOR FILING DATE: 2001-10-26
PRIOR FILING DATE: 2001-10-26
                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: PCT/US02/31096
CURRENT FILING DATE: 2002-09-26
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APPLICANT:
APPLICANT:
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PRIOR APPLICATION NUMBER: US 60/326,388
PRIOR FILING DATE: 2001-09-28
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APPLICANT
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LICANT: GAO, Jing
LE OF INVENTION: ENZYMES
LE REFERENCE: PF-1214 PCT
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                                                                                                                                                                    APPLICATION NUMBER: US 60/338,048 FILING DATE: 2001-11-08 APPLICATION NUMBER: US 60/332,340
                                                                                                              FILING DATE: 2001-11-16
APPLICATION NUMBER: US 60/340,357
FILING DATE: 2001-12-14
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APPLICATION NUMBER: US 60/387,119
FILING DATE: 2002-06-07
APPLICATION NUMBER: US 60/368,799
FILING DATE: 2002-03-29
APPLICATION NUMBER: US 60/368,722
FILING DATE: 2002-03-29
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LEE, Soo Yeun
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DUGGAN, Brendan M.
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SWARNAKAR, Anita
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RESULT 15
US-09-791-537-46537
| Sequence 46537, Application US/09791537
| GENERAL INFORMATION:
| APPLICANT: Bloomix, Inc.
| APPLICANT: Debe, Derek
| APPLICANT: PETILE OF INVENTION: METHODS OF USE THEREOF
| FILE REFERENCE: 261/210
| CURRENT APPLICATION NUMBER: US/09/791,537
| CURRENT APPLICATION NUMBER: US/09/791,537
| CURRENT FILING DATE: 2001-02-22
| NUMBER OF SEQ ID NOS: 153055
| SOFTWARE: Patentin version 3.0
| SEQ ID NO 46537
| LENGTH: 543
| TYPE: PRT
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Search completed: November 13, 2002, 13:39:21 Job time: 161.511 secs
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NUMBER OF SEQ ID NOS: 106
SOFTWARE: PERL Program
SEQ ID NO 25
LENGTH: 608
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
FEATURE:
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Best Local Similarity 75.0%;
Matches 6; Conservative
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572 EQEVRDIR 579
                                                                                              1 EQEIRDLR 8
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235 EQDVRDLR 242
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Pred. No. 6e+02;
2; Mismatches 0; Indels
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Sequence 430, App
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GENERAL INFORMATION:
APPLICANT: EBRINGER, ALAN
TITLE OF INVENTION: DIAGNOSIS OF DEMYELINATING OR
FILE REFERENCE: 78104.040

CURRENT APPLICATION NUMBER: US/09/856,086

CURRENT FILING DATE: 2001-07-30

CURRENT FILING DATE: 2001-07-30

NUMBER OF SEQ ID NOS: 7

SOFTWARE: Patentin version 3.1

SEQ ID NO 7

LENGTH: 8

TYPE: PRT
ORGANISM: Homo sapiens, Bos
                                                                                                                        Sequence 7973, Application US/09513999C
(GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Duclert, A.
APPLICANT: Duclert, A.
APPLICANT: Direction, J.Y.
APPLICANT: Expressed Sequence Tags and
FILE REFERENCE: 59.US2.REG
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR FILING DATE: 1999-02-26
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US-09-513-999C-7973, Ap
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                                          ; ORGANISM: Homo sapiens US-09-513-999C-7973
                                                               NUMBER OF SEQ ID NOS: 3
SOFTWARE: Patent.pm
SEQ ID NO 7973
LENGTH: 143
TYPE: PRT
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Best Local Similarity
Matches 8; Conserv
      Query Match
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US-09-856-086-6
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; ORGANISM: Mus sp.
PCT-US02-31996-16
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CURRENT FILING DATE: 2001-07-30
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PATENTIN VERSION 3.1
SEQ ID NO 6
LENGTH: 6
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SOFTMARE: PatentIn version 3.1
SEQ ID NO 16
LENGTH: 116
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SENERAL INFORMATION:
APPLICANT: EBRINGER, ALAN
TITLE OF INVENTION: DIAGNOSIS OF DEMYELINATING OR SPONGIFORM DISEASE
FILE REFERENCE: 78104.040
                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 75.0
Matches 6; Conservative
                                                                                                                                                       Sequence 12, Application PC/TUS0231996 GENERAL INFORMATION:
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CURRENT FILING DATE: 2002-10-04
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PRIOR FILING DATE: 2001-10-09
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CURRENT APPLICATION NUMBER: PCT/US02/31996
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PPLICANT: Butz, Eric A.
PRITCANT: PRACTICE PAIR NOTE PROPERTY PARTY PART
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                   LCANT: Anderson, Dirk M.
E OF INVENTION: MAMMALIAN C-TYPE LECTINS REFERENCE: 3318-WO
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100.0%; Pred. No.
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LENGTH: 236
TYPE: PRT
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                                                                                             PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065364
PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILING DATE: 1997-11-21
PRIOR PRICATION NUMBER: 60/077450
PRIOR FILING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: 60/077632
PRIOR FILING DATE: 1998-03-11
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                                                                       APPLICATION NUMBER: 60/077641
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Filvaroff, Ellen
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Grimaldi, J. Christopher
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Roy, Margaret Ann
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williams, P. Mickey
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Hillan, Kenneth J
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US-10-145-087A-309
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                                    PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR PELING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR TILING DATE: 1997-11-31
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065364
PRIOR APPLICATION NUMBER: 60/076364
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077632
PRIOR APPLICATION NUMBER: 60/077632
PRIOR PILING DATE: 1998-03-11
PRIOR PILING DATE: 1998-03-11
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Best Local
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PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-03-12
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           FILING DATE: 1998-03-
APPLICATION NUMBER: 6
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Shelton, David L.
Stewart, Timothy A.
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Hillan, Kenneth J
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Grimaldi, J. Christopher
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ns, P. Mickey
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                , Audrey
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Best Local :
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TYPE: PRT
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                                                  APPLICATION NUMBER: 60/077632 FILING DATE: 1998-03-11
                                   CATION NUMBER: 60/077641
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GRGANISM: Homo sapiens US-10-143-031A-309
                                     PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR FILING DATE: 1997-10-17
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
PRIOR FILING DATE: 1997-11-03
PRIOR FILING DATE: 1997-11-13
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Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 624

SEQ ID NO 309
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APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630P1C45
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PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-03-10
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Local Similarity 100.0%; Pred. No.
1es 6; Conservative 0; Mismatc
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Botstein, David
Desnoyers, Luc
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Tumas, Daniel
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Grimaldi, J. Christopher
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1998-03-1

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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C56
CURRENT APPLICATION NUMBER: U$/10/162,522A
CURRENT FILING DATE: 2002-10-10.
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/06250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/06259
PRIOR FILING DATE: 1997-11-03
PRIOR FILING DATE: 1997-11-03
PRIOR FILING DATE: 1997-11-33
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065312
PRIOR APPLICATION NUMBER: 60/065314
PRIOR APPLICATION NUMBER: 60/070450
PRIOR PILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/076364
PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/076364
PRIOR FILING DATE: 1998-03-10
PRIOR PILING DATE: 1998-03-10
PRIOR PRIOR PRIOR NUMBER: 60/077632
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LENGTH: 406
TYPE: PRT
ORGANISM: Homo saplens
US-10-145-092A-309
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Matches 6; Conserv
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FILING DATE: 1998-03-12
               APPLICATION NUMBER: 60/077641 FILING DATE: 1998-03-11
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                                                            FILING DATE: 1998-03-1
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Stewart, Timothy A.
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Grimaldi, J. Christopher
Gurney, Austin L.
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Tumas, P. Mickey
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NUMBER: 60/077649
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TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C29
CURRENT APPLICATION UNMER: US/10/165,038A
CURRENT FILING DATE: 2002-10-10
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/064249
PRIOR APPLICATION NUMBER: 60/06311
PRIOR FILING DATE: 1997-11-03
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/065314
PRIOR APPLICATION NUMBER: 60/065314
PRIOR APPLICATION NUMBER: 60/065314
PRIOR APPLICATION NUMBER: 60/065314
PRIOR FILING DATE: 1997-11-13
PRIOR FILING DATE: 1997-11-13
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077450
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Best Local Similarity
"~+~hes 6; Conserv
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US-10-165-038A-309
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NUMBER OF SEQ ID NOS: 624
SEQ ID NO 309
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APPLICANT:
APPLICANT:
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TYPE: PRT
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APPLICATION NUMBER: 60/077450
FILING DATE: 1998-03-10
APPLICATION NUMBER: 60/077632
FILING DATE: 1998-03-11
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Baker Kevin P.
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Williams, P. Mickey
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Stewart, Timothy A.
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Filvaroff,
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Hillan, Kenneth J
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Grimaldi, J. Christopher
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ljavin,
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Sophia S.
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ff, Ellen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mary A.
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; TYPE: PRT; ORGANISM: Homo sapiens
US-10-165-038A-309
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                                                                                                          PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/06240
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
PRIOR FILING DATE: 1997-11-13
PRIOR FILING DATE: 1997-11-13
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Best Local Similarity
Matches 6; Conserv
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PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1998-03-12
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EQ ID NO 309
                                                                                                                                                                                                                                      APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P3630P1C40
CURRENT APPLICATION NUMBER: U5/10/165,353
CURRENT FILING DATE: 2002-10-10
CURRENT FILING DATE: 2002-10-10
                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
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        OR APPLICATION NUMBER: 60/066364
OR FILING DATE: 1997-11-21
OR APPLICATION NUMBER: 60/077450
OR FILING DATE: 1998-03-10
OR APPLICATION NUMBER: 60/077632
OR FILING DATE: 1998-03-11
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APPLICATION NUMBER: 60/077641
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Shelton, David L.
Stewart, Timothy A.
Tumas, Daniel
Williams, P. Mickey
Wood, William I.
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Botstein, David
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illan, Kenneth J
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Sophia S.
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APPLICATION NUMBER: 60/065311
FILING DATE: 1997-11-13
APPLICATION NUMBER: 60/066364
FILING DATE: 1997-11-21

60/077450

APPLICATION NUMBER: 60/077632 FILING DATE: 1998-03-11 APPLICATION NUMBER: 60/ FILING DATE: 1998-03-10

APPLICATION NUMBER: 60

60/077641

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; LENGTH: 406
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-165-353-309
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US-10-170-481A-309
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PRIOR APPLICATION NUMBER: 60/077791
PRIOR FILING DATE: 1998-03-12
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 624
SEQ ID NO 309
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Best Local :
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PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR PPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
                                                                                                   FILE REFERENCE: P2630P1C53
CURRENT APPLICATION NUMBER: US/10/170,481A
CURRENT FILING DATE: 2002-10-10
                                                                                                                                                   APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
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les 6; Conservative
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Botstein, David
Desnoyers, Luc
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Filvaroff,
                                                                                                                                                                                                                     Tumas, Daniel
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Kuo, Sophia S.
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Grimaldi, J. Christopher
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100.0%; Pred. No.
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RESULT 13
US-10-172-039A-309
Commence 309, App
                                                                                                   TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630PLC30
CURRENT APPLICATION UNUMER: US/10/172,039A
CURRENT FILING DATE: 2002-10-10
PRIOR APPLICATION NUMBER: 09/91858
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/66250
PRIOR APPLICATION NUMBER: 60/662250
PRIOR APPLICATION NUMBER: 60/064249
PRIOR APPLICATION NUMBER: 60/064249
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065364
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Best Local Similarity
Watches 6; Conserve
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SEQ ID NO 309
LENGTH: 406
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               PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: 60/077632
PRIOR FILING DATE: 1998-03-11
PRIOR FILING DATE: 1998-03-11
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APPLICATION NUMBER: 60/077641
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Stewart, Timothy A.
Tumas, Daniel
Williams, P. Mickey
Wood, William I.
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Grimaldi, J. Christopher
Gurney, Austin L.
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US-10-172-039A-309
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LENGTH: 406
TYPE: PRT
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Best Local :
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                                                                                                                                                         TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: p2630P1C52
CURRENT APPLICATION NUMBER: US/10/145,016A
CURRENT FILING DATE: 2001-10-18
PRIOR APPLICATION NUMBER: 09/918585
PRIOR PILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/064249
PRIOR APPLICATION NUMBER: 60/064249
PRIOR APPLICATION NUMBER: 60/064249
PRIOR PILING DATE: 1997-11-03
PRIOR PILING DATE: 1997-11-03
PRIOR PILING DATE: 1997-11-03
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Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 624
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PRIOR FILING DATE: 1997-11-13
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                                                          APPLICATION NUMBER: 60/066364
FILING DATE: 1997-11-21
APPLICATION NUMBER: 60/077450
FILING DATE: 1998-03-10
                                             APPLICATION NUMBER:
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Williams, P. Mickey
Wood, William I.
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Filvaroff, Ellen
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Stewart, Timothy A.
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Hillan, Kenneth J
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Grimaldi, J. Christopher
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APPLICANT: Ray, Margaret A....
APPLICANT: Shelton, David L.
APPLICANT: Shelton, David L.
APPLICANT: Stewart, Timothy A.
APPLICANT: Tunas, Daniel
APPLICANT: William I.
ITITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
ITITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: PD630PLC4
CURRENT APPLICATION NUMBER: US/10/145,088A
CURRENT FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/062311
PRIOR APPLICATION NUMBER: 60/06364
PRIOR FILING DATE: 1997-11-33
PRIOR APPLICATION NUMBER: 60/07450
PRIOR APPLICATION NUMBER: 60/077450
PRIOR APPLICATION NUMBER: 60/077632

"TILING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: 60/077632

"TLING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077632
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-145-016A-309
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PRIOR APPLICATION NUMBER: 60/077791
PRIOR FILING DATE: 1998-03-12
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 624
SEQ ID NO 309
FEWERER 166
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Local Similarity 100.0%; Pred. No. 65
hes 6; Conservative 0; Mismatches
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Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J
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Desnoyers, Luc
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Filvaroff, Ellen
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erritsen, Mary E.
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; SEQ ID NO 309
; LENGTH: 406
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-145-088A-309
Search completed: November 13, 2002, 13:39:41 Job time: 4.23404 secs
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                                                                                                                                    Query Match 74.4%;
Best Local Similarity 100.0%;
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PRIOR APPLICATION NUMBER: 60/077791
PRIOR FILING DATE: 1998-03-12
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 624
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pyruvate kinase (E
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neurofilament trip
neurofilament trip
            transcription anti
                                  gp46 protein - }
cytochrome c552
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                                                                                                                                                                                                          neurofilament-L
                                                                                                Lamin -
                                                                                                chicken
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ALIGNMENTS

A; Accession: A2000 A; A; Accelle type: mRNA A; Residues: 242-543 <LE2> A; Cross-references: GB:X02165 A; Experimental source: brain A; Dillen, J.P.; Meyer, D; Flavell, D; Hurst, J; Grosveld, F. Brain Res. Mol. Brain Res. 1, 243-250, 1986 A; Julien, J.P.; Meyer, D; Flavell, D; Hurst, J; Grosveld, F. Brain Res. Mol. Brain Res. 1, 243-250, 1986 A; Julien, J.P.; Meyer, D; Flavell, D; Hurst, J; Grosveld, F. Brain Res. Mol. Brain Res. 1, 243-250, 1986 A; Molecule type: mRNA A; Residues: 1-5, YY, 7-8, YY, 10-64, YM, 66-72, YL', 74-98, 'D', 100-194, 'R', 196-202, 204-239 A; Molecule type: mRNA A; Reference number: A40480; NID:920037; PIDN:AAA39814.1; PID:9200038 A; Molecule type: protein A; Reference number: 15316; MUID:92011653; PMID:1717455 A; Reference number: 15316; MUID:91060592; PMID:2246261 A; Reference number: 15316; MUID:91060592; PMID:2246261 A; Residues: 1-5, YY, 7-8, YY, 10-28 <RES> A; Cross-references: GB:M55423; NID:920027; PIDN:AAA39812.1; PID:9554245 C; Comment: This is the most abundant of the three neurofilament proteins and, as the R;Lewis, S.A.; Cowan, N.J.
J. Cell Biol. 100, 843-850, 1985
A;Title: Genetics, evolution, and expression of the 68,000-mol-wt neurofilament prote A;Reference number: A26562; MUID:85131334; PMID:3919033
A;Accession: A26562 A;Title: Anomalous placement of introns in a member of the A;Reference number: A25227; MUID:87064433; PMID:3785173 A;Accession: A25227 C;Species: Mus musculus (house mouse)
C;Date: 31-Mar-1988 #sequence_revision 30-Sep-1993 #text_change
C;Accession: A25227; A26562; A43772; A41012; I55316 neurofilament triplet L protein - mouse N; Alternate names: 68K neurofilament protein; NF-L(low) protein; type IV IF protein A;Cross-references: GB:M13016; NID:g200023; PIDN:AAA39810.1; PID:g387492 A;Note: the authors translated the codon GGC for residue 5 as Ala, ACA for A; Molecule type: DNA A; Residues: 1-543 <LEW> R; Lewis, Cell. Biol. 6, 1529-1534, 1986 S.A.; Cowan, intermediate filament 22-Jun-1999 residue mult 88

prote

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C;Genetics:
A;Introns: 349/3; 391/2; 498/1
A;Introns: 349/3; 391/2; 498/1
C;Superfamily: cytoskeletal karatin
C;Keywords: coiled coil; intermediate fila
F;2-72/Domain: head <HED>
F;4-72/Domain: coil la, alpha-helical rc
F;136-138/Region: linker 1
F;139-234/Domain: coil lb, alpha-helical rc
F;139-234/Domain: coil lb, alpha-helical rc
F;255-256/Region: linker 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N;Alternate names: neurofilament light polypeptide (68K)
N;Contains: Glu-50 brain peptide
C;Species: Homo sapiens (man)
C;Date: 29-Jan-1993 #sequence_revision 29-Jan-1993 #text_change 21-Jul-2000
C;Date: 29-Jan-1993 #sequence_revision 29-Jan-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: GB:S70309; NID:g547176; PIDN:AAD14057.1; PID:g4261757 R;Nomatta, Y.; Watanabe, T.; Wada, H. J. Blochem. 93, 825-831, 1983 A;Title: Highly acidic proteins from human brain: purification and properties of Glu-50 A;Reference number: A60703; MUID:83265687; PMID:6135695 A;Accession: A60703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-544 <JUL>
A; Rospelova: Translated the codon ATG for residue 366 as Asn
R; Note: the authors translated the codon ATG for residue 366 as Asn
R; Pospelova: T. V.; Julien, J.P.
Cell Growth Differ. 5, 187-196, 1994
Cell Growth Differ. 5, 187-196, 1994
A; Reference number: 152832; MUID:94235564; PMID:8180132
A; Accession: 152832; MUID:94235564; PMID:8180132
A; Accession: 152832; MUID:94235564; PMID:8180132
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Molecule type: protein
A;Regidues: 469-472,'D',474 <NOM>
A;Experimental source: Glu-50 brain peptide
                                                                                                                                            A:Map position: 8p21-8p21
A:Introns: 349/3; 391/2; 498/1
C:Superfamily: cyttoskeletal kei
C:Keywords: brain; coiled coil
F:469-544/Product: Glu-50 pept:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: DNA
A; Residues: 1-10 <POS>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Status: preliminary; translated from GB/EMBL/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Note: this acidic protein is named
                                                                                                                                                                                                                                                                                                                                                                           A; Gene: GDB: NEFL; NFL
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404-543/Domain: tail <TAI>
404-444/Region: tail subdomain a
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235-256/Region: linker 12
257-272/Domain: coil 2a, alpha-helical rod #status predicted <R2A>
273-281/Region: linker 2
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Best Local
                                                                                                                                        ;Superfamily: cytoskeletal keratin
;Keywords: brain; colled coll; intermedia
;469-544/Product: Glu-50 peptide #status
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perfamily: cytoskeletal keratin
ywords: coiled coil; intermediate filament
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8; Conserv
                                 Similarity
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ilarity 100.0%;
Conservative 0,
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tail subdomain b
                            100.0%;
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le #status predicted <E50>
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Pred. No.
                                     Score 39;
Pred. No.
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9.6;
                                     9.6;
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                                                                          DB 2;
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                                                                              Length 544;
Indels
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C;Species: Sus scrofa domestica (domestic p19)
C;Date: 15-Nov-1984 #sequence_revision 28-May-1986 #text_change 10-Oct-1997
C;Accession: A91337; A90973; A34569; A02963
R;Geisler, N.; Plessmann, U.; Weber, K.
FEBS Lett. 182, 475-478, 1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Comment: Mammallan neurofilaments usually contain three polypeptides, L, M, and H ke all other intermediate filament proteins: a conserved alpha-helical region, whose c;Comment: The amino-terminal headplece is basic with a high content of hydroxyaminc al beta turns; domain b is acidic and rich in glutamic acid and lysine residues. C;Comment: The extra mass and high charge density that distinguish the neurofilament charged scaffolding structure suitable for interaction with other neuronal componer c;Comment: The boundaries of the domains between residues 70-92 and 399-402 are not C;Comment: This protein was isolated from spinal cord. C;Superfamily: cytoskeletal keratin
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A;Title: Involvement of protein kinase C in the regulation of assembly disassembly C A;Reference number: A34569; MUID:90211318; PMID:2108674
A;Accession: A34569
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C; Keywords: coiled coil; intermediate filament
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Title: Neurofilament architecture A; Reference number: A90973 A; Accession: A90973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R;Geisler, N.; Kaufmann, E.; Fischer, S.; Plessmann, U.; Weber, EMBO J. 2, 1295-1302, 1983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N; Alternate names: 68K neurofilament
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                                                                                                           neurofilament protein-L - bovine
N;Alternate names: NF-L
C;Species: Bos primigenius taurus (cattle)
C;Species: Bos primigenius taurus (cattle)
C;Date: 03-unl-1998 #sequence_revision 10-unl-1998 #text_change 07-May-1999
C;Date: 03-unl-1998 #sequence_revision 10-unl-1998 #text_change 07-May-1999
C;Accession: JW0094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      F;402-442/Region:
F;443-548/Region:
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A; Residues: 9-14;23-29;30-53 <GON>
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R;Hashimoto, R.; Nakamura, Y.; Goto, H.; Wada, Y.; Sakoda, S.; Kaibuchi, K.; Inagak: Biochem. Biophys. Res. Commun. 245, 407-411, 1998
A;Title: Domain- and site-specific phosphorylation of bovine NF-L by Rho-associated A;Reference number: JW0094; MUID:98238650; PMID:9571184
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                     138 EQEIRDLR 145
                                                                                                                                                                                                                                                                                                                                                                                                                                            1 EQEIRDLR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        type: protein
1-82;278-548 <GE2>
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ilarity 100.0%;
Conservative 0
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Pred. No.
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A;Cross-references: GB:M65026
A;Note: readthrough of the terminator TAA occurs between codons ACA for 22-Thr and GTT R;Hay, J.M.; Jones, M.C.; Blakebrough, M.L.; Dasgupta, I.; Davies, J.W.; Hull, R. Nucleic Acids Res. 19, 2615-2621, 1991
A;Title: An analysis of the sequence of an infectious clone of rice tungro bacilliform A;Reference number: S16666; MUID:91252204; PMID:2041739
A;Accession: S16666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hypothetical protein, 24K - rice tungro bacilliform virus
N;Alternate names: hypothetical protein 1
C;Species: rice tungro bacilliform virus, RTBV
C;Date: 20-Mar-1992 #sequence_revision 20-Mar-1992 #text_change 11-Jan-2002
C;Date: 20-Mar-1993 #sequence_revision 20-Mar-1992 #text_change 11-Jan-2002
C;Accession: A4078; S16666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Accession: JW0094
A;Molecule type: protein
A;Residues: 1-554 <HAS>
C;Comment: Domain- and site-specific phosphorylation by Rho-kinase regulates the C;Superfamily: cytoskeletal keratin
                                                                                                                                                                                                                         phosphoenolpyruvate carboxykinase (GTP) (EC 4.1.1.32) precursor, mitochondrial C;Species: Homo sapiens (man)
C;Date: 14-Feb-1997 #sequence_revision 13-Mar-1997 #text_change 20-Jun-2000 C;Accession: S69546
R;Modaressi, S; Christ, B.; Bratke, J.; Zahn, S.; Heise, T.; Jungermann, K. Blochem. J. 315, 807-814, 1996
B;Title: Molecular cloning, sequencing and expression of the cDNA of the mitoch A;Reference number: S69546; MUID:96220691; PMID:8645161
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                                           A; Note: the authors
C; Genetics:
A; Genome: nuclear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Molecule type: DNA
A;Residues: 23-116,/F',118-221 <HAY>
A;Residues: 23-116,/F',118-221 <HAY>
A;Cross-references: EMBL:X57924; NID:g61910; PIDN:CAA40995.1; PID:g1334939
A;Experimental source: Philippine isolate
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, Fel
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                                                                                                                                                                                                           A; Reference number: A; Accession: S69546
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                                                                                                                                         A; Molecule type: mRNA
A; Residues: 1-640 < MOD>
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                                                                                                               A; Cross-references:
                                                                                                                                                                                  A; Status: preliminary
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;Superfamily: phosphoenolpyruvate carboxykinase (GTP)
;Keywords: carbon-carbon lyase; carboxy-lyase; mitochondrion
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8; Conser
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llarity 100.0%;
Conservative 0
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                                                                                         EMBL: x92720; NID: g1403049; PIDN: CAA63380.1; translated the codon GCC for residue 477 as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   92.3%;
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Pred. No.
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         Best Local
Matches
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C;Species: Mus musculus (house mouse)
C;Date: 13-Aug-1986 #sequence_revision 30-Jun-1993 #text_change 10-Dec-1999
C;Accession: B60052; A24343; A02960; S42464; I49688
R;Brenner, M.; Lampel, K.; Nakatani, Y.; Mill, J.; Banner, C.; Mearow, K.; I
Brain Res. Mol. Brain Res. 7, 277-286, 1990
A;Title: Characterization of human Canad genomic clones for glial fibrill A;Reference number: A60052; MUID:90294716; PMID:2163003
A;Accession: B60052
                                                                                                                                                                                                                                                                                                                                                                         A;Cross references: EMBL:X78141; NID:g460826; PIDN:CAA55020.1; P:R;Cowan, N.J.; Lewis, S.A.; Balcarek, J.M.; Krek, V.; Shelanski, Ann. N. Y. Acad. Sci. 455, 575-582, 1985
A;Title: Structural implications of a cDNA clone encoding mouse garderence number: I49688; MUID:86101618; PMID:3866511
A;Accession: I49688
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A;Residues: 'MPPRRWSGAS',23-346,'H',348-430 <BAL>
A;Residues: 'MPPRRWSGAS',23-346,'H',348-430 <BAL>
A;Residues: 'MPPRRWSGAS',23-346,'H',348-430 <BAL>
A;Residues: 'MPPRRWSGAS',23-346, NID:g51065; PIDN:CAR26571.1; PID:g51066
A;Note: the authors translated the codon CAT for residue 174 as Asp, A(
R;Lewis, S.A.; Balcarek, J.M.; Krek, V.; Shelanski, M.; Cowan, N.J.
Proc. Natl. Acad. Sci. U.S.A. 81, 2743-2746, 1984
A;Title: Sequence of a CDNA clone encoding mouse glial fibrillary acid:
A;Reference number: A02960; MUID:84194082; PMID:6585825
A;Accession: A02960
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      glial fibrillary acidic protein, astrocyte - N;Alternate names: GFAP
                                                                                                          A;Cross-references: GB:M25937; NID:g193467; PIDN:AAA37679.1; PID:g387164 C;Comment: GFAP is a cell-specific marker that, during the development of C;Superfamily: cytoskeletal keratin C;Superfamily: cytoskeletal keratin C;Keywords: colled coll; intermediate filament C;Keywords: head (fragment) #status predicted <HED> F;20-348/Domain: rod #status predicted <ROD>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Noie: the authors translated the codon CAT for residue R; Ralton, J.E.; Lu, X.; Hutcheson, A.M.; Quinlan, R.A. submitted to the EMBL Data Library, March 1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: DNA
A; Residues: 1-57 <BR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Description: Identification of two non-alpha-helical A; Reference number: S42464
A; Accession: S42464
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A;Residues: 28-430 <LEW>
A;Residues: 28-430 <LEW>
A;Cross-references: GB:KO1347; NID:g193465; PIDN:AAA37678.1;
A;Experimental source: clone G1
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                                                                                     F;349-403/Domain: tail #status
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A; Residues: 28-430 < RES>
                                                                                                                                                                                                                                                                                                                                              A;Status: preliminary; translated from GB/EMBL/DDBJ
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A; Residues: 1-26 <RAL>
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89.78;
75.08;
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Pred. No. 43;
Score 35;
Pred. No.
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Similarity 6; Conserv

Conservative

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Mismatches

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Indels

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Gaps

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43;

μ;

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C:Species: Xenopus laevis (African clawed frog)
C:Date: 31-Mar-1993 #sequence_revision 18-Nov-1994 #text_change 12-Apr-1995
C:Accession: A44841
R:Charnas, L.R.; Szaro, B.G.; Gainer, H.
J. Neurosci. 12, 3010-3024, 1992
A;Title: Identification and developmental expression of a novel low molecul A;Reference number: A44841; MUID:92356194; PMID:1494944
A;Recession: A44841
A;Accession: A44841
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-469 CCHA>
A;Residues: 1-469 CCHA>
A;Residues: 1-469 CCHA>
A;Rote: sequence extracted from NCBI backbone (NCBIN:110223, NCBIP:110224)
C;Superfamily: cytoskeletal keratin
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A; Residues: 1-98, 'T',100-200,'S',202-349,'p',351-391,'R',393-543 <TAN1>
A; Residues: 1-98,'T',100-200,'S',202-349,'p',351-391,'R',393-543 <TAN1>
A; Residues: 1-98,'T',100-200,'S',202-349,'p',351-391,'R',393-543 <TAN1>
A; Residues: 1-98,'T',100-200,'S',202-349,'p',351-391,'R',393-543 <TAN2>
A; Residues: 1-98,'T',100-200,'S',202-349,'R',100-200,'S',202-349,'R',100-200,'S',202-349,'R',100-200,'S',202-349,'R',100-200,'S',202-349,'R',100-200,'S',202-349,'R',100-200,'S',202-349,'R',100-200,'S',202-349,'R',100-200,'S',202-349,'R',100-200,'S',202-349,'R',100-200,'S',202-349,'R',100-200,'S',202-200,'R',100-200,'S',202-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',100-200,'R',1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Status: nucleic acid sequence not shown; translation not shown; translated from A;Molecule type: DNA
A;Molecule type: DNA
A;Rosidues: 'MSIQENISSLQLRSWYSKSQRDLAKSILIGAPGVPLTTQQCGADPQRGRPREVCSG',1-543.<KAND
A;Cross-references: GB:D13243; NID:9220048; PID:9220050
A;Cross-references: GB:D13243; NID:9220048; PID:9220050
A;Cross-references: GB:D13243; NID:9220048; PID:9220050
A;Note: following the authors' interpretation the GenBank translation starts with R;Tan1, K.; Fujii, H.; Negata, S.; Miwa, S.
Proc. Natl. Acad. Sci. U.S.A. 85, 1792-1795, 1988
A;Title: Human liver type pyrivate kinase: complete amino acid sequence and the exa;Reference number: A30150; MUID:88158079; PMID:3126495
A;Accession: A30150
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A;Cross-references: GB:J03640; NID:g189995
C;GenetLcs:
A;Gene: GDB:PKLR
A;Cross-references: GDB:120294; OMIM:266200
A;Map position: 1q21-1q21
A;Introns: 3/1; 64/1; 94/3; 138/3; 201/1; 291/2; 341/3; 392/3; 448/2; A;Note: alternative promoters are used for the erythrocyte (R) and hep C;Complex: homotetramer
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C;Function:
A;Description: catalyzes the transphosphorylation of phosphoenolpyruvate and ADP to A;Description: catalyzes the transphosphorylation of phosphoenolpyruvate and ADP to A;Desthway: glycolysis; gluconeogenesis
C;Superfamily: pyruvate kinase
F;2812/Binding site: phosphate (Ser) (covalent) (by cAMP-dependent kinase) #status predicted
F;285,305/Binding site: substrate phosphate (Arg, Ser, Arg) #status predicted
F;284,305,306/Binding site: magnesium (Glu, Ala, Arg) #status predicted
F;341,376/Binding site: potassium (Gln, Glu) #status predicted
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C;Species: Coturnix coturnix (quail)
C;Date: 21-Sep-1993 #sequence_revision 18-Nov-1994 #text_change
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A; Residues: 1-556 < COHA>
A; Experimental source: subsp. japonica, TKP
A; Note: sequence inconsistent with the nucleotide translation
A; Note: sequence extracted from NCBI backbone (NCBIN:129455, NC); Superfamily: cytoskeletal keratin
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A;Title: Neurofilament deficiency in quail caused by nor A;Reference number: A46024; MUID:93224534; PMID:8468353
A;Accession: B46024
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ssociated with hereditary hemolytic
A; Reference number: A40991; MUID:91:
A; Accession: A40991
A; Molecule type: mRNA
A; Residues: 1-37;570-574 <KA3>
                                                                                                                         A;Molecule type: DNA
A;Residues: 1-33,'VPLITTQQCGADPQRGRPREVCSGME',34-574 <KAN>
A;Residues: 1-33,'VPLITTQQCGADPQRGRPREVCSGME',34-574 <KAN>
A;Cross-references: GB.D13243; NID:g220048; PID:g220050
A;Note: following the authors' interpretation the GenBank
A;Note: following the authors' interpretation the GenBank
R;Kanno, H.; Fujil, H.; Hirono, A.; Miwa, S.
Proc. Natl. Acad. Sci. U.S.A. 88, 8218-8221, 1991
A;Title: CDMA cloning of human R-type pyruvate kinase and
                                                                                                                                                                                                                                                                                                     R;Kanno, H.; Fujii, H.; Miwa, S.

Biochem. Biophys. Res. Commun. 188, 516-523, 1992
Biochem. Biophys. Res. Commun. 188, 516-523, 1992
A;Title: Structural analysis of human Pyruvate kinase L-gene A;Reference number: I52269; MUID:93075125; PMID:1445295
A;Accession: I52269
A;Status: nucleic acid sequence not shown; translation not sh
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C;Complex: homotetramer
C;Function:
A;Description: catalyzes the transphosphorylation of phosphoenolpyruvate and ADP to pyru
A;Description: catalyzes the transphosphorylation of phosphoenolpyruvate and ADP to pyru
A;Pathway: glycolysis
C;Superfamily: pyruvate kinase
C;Superfamily: pyruvate kinase
C;Superfamily: pyruvate kinase
C;Keywords: alternative initiators; alternative splicing; ATP biosynthesis; erythrocyte;
C;Keywords: alternative initiators; alternative splicing; ATP biosynthesis; erythrocyte;
F;43/Binding_site: phosphate (Ser) (covalent) (by cAMP-dependent kinase) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: mRNA
A; Residues: 365-380, 'P', 382-431 <KA2>
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A;Experimental source: reticu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Species: Bacillus halodurans
C;Date: 01-Dec-2000 #sequence_revision 01-Dec-2000 #text_change 15-Jun-2001
C;Accession: H83875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (Ser) (covalent) (by come corrections) (by come corrections) #status F;43/Binding site: phosphate (Arg, Ser, Arg) #status F;116,286,337/Binding site: substrate phosphate (Arg, Ser, Arg) #status F;313/Active site: tes #status predicted F;315,336,337/Binding site: magnesium (Glu, Ala, Arg) #status predicted F;315,336,337/Binding site: magnesium (Glu, Glu) #status predicted
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A;Introns: 34/1; 95/1; 125/3; 169/3; 232/1; 322/2; 372/3; 423/3; 479/2; 540,
A;Note: alternative promoters are used for the erythrocyte (R) and hepatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Cross-references: GDB:120294; OMIM:266200
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                   hypothetical protein B7N4.20 [imported] - Neurospora crassa C; Species: Neurospora crassa C; Species: Neurospora crassa C; Date: 28-Jul-2000 #sequence_revision 28-Jul-2000 #text_change C; Accession: T51195 R; Schulte, U.; Aign, V.; Hoheisel, J.; Brandt, P.; Fartmann, B.;
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                                                                                                                                                            RESULT 13
T51195
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A;Title: Complete genome sequence of the alkaliphilic bacterium A;Reference number: A83650; MUID:20512582; PMID:11058132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          two-component response regulator BH1808 [imported] - Bacillus halodurans (strain
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A;Experimental source: strain C-125
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Biophys. Res. Commun. 192, 46-52, 1993
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Hoheisel, J.; Brandt, P.; Fartmann, Sequence Database, July 2000
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                                    B:;
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                                  Holland, R.;
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                                                                                                                                                                                                                                                       A;Molecule type: mRNA
A;Restdues: 1-300,412-670 <FE5>
A;Cross-references: GB:L13935
A;Cross-references: GB:L13935
A;Chem. 268, 12207-12212, 1993
J. Biol. Chem. 268, 12207-12212, 1993
A;Tetle: purification of a novel phospholipase C isozyme
A;Reference number: A45975; MUID:93280199; PMID:8389372
                 odiesterase domain Y homology
C;Keywords: alternative splicing; phosphoric diester hydrolase
F;1-1023/Product: phospholipase C beta-I form B (fragment) #st
                                                                                        A; Experimental source: cerebellum
A; Note: sequence modified after extraction from NCBI backbone
C; Superfamily: 1-phosphatidylinositol-4,5-bisphosphate phosph
                                                                                                                                                 A; Molecule type: protein
A; Residues: 20-23,'D',25-28,'X',30-31,'DX',34-35,'L',37;259,'X',261-269;315-327,'I',3
A; Experimental source: cerebellum
A; Experimental source: cerebellum
A; Experimental source: cerebellum
                                                                                                                                                                                                                                A; Reference number:
A; Accession: A45975
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RESULT 14
B36932
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A;Experimental source: BAC clone B7N4; strain OR74A
                                                                                                                                                                                                                A; Molecule type: DNA
A; Residues: 1-497 <SCH>
                                                                                                                                                                                                                                         A; Status: preliminary
                                                                                                                                                                                                                                                    A; Accession: T51195
                                                                                                                                                                                                                                                               A; Reference number: 225286
                                                                                                                                            A; Introns:
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Best Local :
                                                                                                                                                                     Gene: NCSP:B7N4.20
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C;Species: Bos primigenius taurus (cattle)
C;Date: 23-Mar-1995 #sequence_revision 05-Apr-1995 #text_change 22-Jun-1999
C;Accession: B38932; A38932; C38932; D38932; A48193; A45975; B45975; B48193; R;Ferreira, P.A.; Shortridge, R.D.; Pak, W.L. submitted to GenBank, August 1993
A;Reference number: A38932
A;Accession: B38932 phospholipase C (EC 3.1.4.3) beta-I form B - bovine (fragment) N, Alternate names: phospholnositide-specific phospholipase C 1 A;Cross-references: GB:L13938; NID:g304244; PIDN:AAA3070 A;Experimental source: retina R;Ferreira, P.A.; Shortridge, R.D.; Pak, W.L. Proc. Natl. Acad. Sci. U.S.A. 90, 6042-6046, 1993 A;Title: Distinctive subtypes of bovine phospholipase C A;Reference number: A48193; MUID:93317620; PMID:8327481 A;Accession: A48193 A; Residues: 1-373,386-1023 <FE2>
A; Cross-references: GB:L13935; NA; Experimental source: retina A;Cross-references: GB:L13936; NID:g304240; PIDN:AAA30699.1; A; Molecule type: mI A; Residues: 1-1023 A;Molecule type: mRNA A;Residues: 105-1023 <FE4> A;Residues: 105-373,386-1023 <FE3>
A;Cross-references: GB:L1337; NID:g304242; PIDN:AAA30700.1; A; Molecule type: mkna A: Residues: 105-373,386-1023 A;Accession: C38932 A; Molecule type: mRNA A; Accession: A3893 A; Experimental source: retina A;Accession: D38932 A; Experimental source: retina mRNA <FER> NID: g304238; PIDN: AAA30701.1; PIDN: AAC37304.1; that have PID:g304241 PID: 9304239 PID:9304243 isozyme Cl; phospholipas PID: 9304245 preferential expres B48193; C45975

Status: nucleic acid sequence

not shown

P.G.; Ryu,

S

from

bovine cerebellum

phosphodiesterase I; 1-phospha

#status

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C;Keywords: phosphoric diester hydrolase
F;315-463/Domain: 1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase domain X
F;565-685/Domain: 1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase domain Y
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Search completed: November 13, 2002, 13:23:31 Job time: 13.5684 secs
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CCross-references: GB:L15556; NID:g404071

Experimental source: brain

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;Lee, C.W.; Park, D.J.; Lee, K.H.; Kim, C.G.; Rhee, S.G.
. Biol. Chem. 268, 21318-21327, 1993
;Title: Purification, molecular cloning, and sequencing of phospholipase C-beta 4.
;Reference number: A48047; MUID:94012687; PMID:8407970
;Accession: A48047
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Best Local :
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Title: Cloning of cDNA encoding rat phospholipase C-beta4, a new member of the phospholipase contact and member of th
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Copyright (c) 1993 - 2002 Compugen
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EMBL; X53981; CAA37931.1;
PIR; A21762; A21762.
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                                                                                                                                                                                                                                                                                                                                                                       MOUSE
                                                                                                      Mus musculus (Mouse).
Eukaryota; Metazoa; Ch
Mammalia; Eutheria; Ro
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01-AUG-1988 (Rel. 08, Created)
01-CTT-1983 (Rel. 27, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Neurofilament triplet L protein (68 kDa neurofilament protein)
Neurofilament light polypeptide) (NF-L).
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MEDLINE-87064433; PubMed-3785173; Lewis S.A., Cowan N.J.;
                                             TISSUE-Brain;
                                                               SEQUENCE FROM N.A
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ilarity 100.0%;
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                                                                                                                                   Chordata;
Rodentia;
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A -> E (IN REF. 2).
EKEK -> KKDE (IN REF. 2).
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TAIL, SUBDOMAIN B (
O-LINKED (GLCNAC).
/FTId-CAR_000128.
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LINKER 1.
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LINKER 2.
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/FTId-CAR_000129.
EPITOPE (RECOGNIZED BY IF-SPECIFIC
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0D17839AF226918A CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 39; DB:
Pred. No. 3.4;
                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                   Craniata; Ver
Sciurognathi;
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                                                                                                                                        Muridae;
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J. BIO1. Chem. 265:19786-19791(1990).

J. BIO1. Chem. 265:19786-19791(1990).

-I. FUNCTION: NEUROFILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, M. AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALLBER.

-I. DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT THE TAILPIECE EXTENSIONS. THIS REGION MAY FO A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH OTHER NEUROPAL COMPONENTS OR IONS.

-I. MISCELLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE-Brain; PubMed-3103856; MEDLINE-87158637; PubMed-3103856; PubMed-3103856;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lewis S.A., Cowan N.J.;
"Genetics, evolution, and expression of the 68,000-mol-wt neurofilament protein: isolation of a cloned cDNA probe.";
J. Cell Biol. 100:843-850(1985).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Julien J.-P., Meyer D., Flavell D., Ru "Cloning and developmental expression gene family.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Anomalous placement of introns in a member of the intermediate filament multigene family: an evolutionary conundrum."; Mol. Cell. Biol. 6:1529-1534(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE-91060592; PubMed-2246261; Nakahira K., Ikenaka K., Wada K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM
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EMBL; M20480; AAA39814.1;
EMBL; M13016; AAA39810.1;
EMBL; M55423; AAA39812.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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PROSITE; PS0022
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ween the Swiss Institute of Bioinformatics and the EMBL outst
European Bioinformatics Institute. There are no restrictions
by non-profit institutions as long as its content is in
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                                                                                                                                                                                                                                                                                                                                                                  )0038; filament;
PS00226; IF; 1.
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                    TAIL.
COIL 1A.
LINKER 1.
COIL 1B.
LINKER 12.
COIL 2A.
LINKER 2.
COIL 2B.
TAIL, SUBDOMAIN A.
TAIL, SUBDOMAIN B.
O-LINKED (GLCNAC) (O-LINKED (GLCNAC)
                                                                                                                                                                                                                                                                              ROD.
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on of the murine neurofilament
                        (ACIDIC).
(BY SIMILARITY).
(BY SIMILARITY).
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collaboration outstation

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FORM

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RESULT 3

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ID L. HUMAN

ID L. HUMAN

ID C. P0719

DT 01-Ap

DT 01-Ap

DT 16-OC

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GN NEFL

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Best Loc
Matches
result of a mutation in the neurofilament-light gene.";
Am. J. Hum. Genet. 67:37-46(2000).

-I. FUNCTION: NEUROFILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L. M. AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER.
-I. DOWAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH
THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT PROTEINS ARE DUE TO THE TAILFIECE EXTENSIONS. THIS REGION MAY FORM A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH OTHER NEURONAL COMPONENTS OR IONS.
-I. DISEASE: DEFECTS IN NEFL ARE A CAUSE OF CHARCOT-MARIE-TOOTH DESEASE TYPE 2E (CMT2E).

-I. MISCELLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERNEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM FILAMENTS: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY.
-I. SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY.
-I. DATABASE: NAME-Inherited peripheral neuropathies mutation db;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CONFLICT
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P07196; Q16154;
01-APR-1988 (Rel. 07, Created)
01-APR-1988 (Rel. 07, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Neurofilament triplet L protein (68 kDa neurofilament protein)
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Am. J.
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MEDLINE-87214213; PubMed-3034332;
MEDLINE-87214213; PubMed-3034332;
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Pospelov V.A., Pospelova T.V., Julien J.-P.;
"AP-1 and Krox-24 transcription factors activate the neurofilament light gene promoter in P19 embryonal carcinoma cells.";
Cell Growth Differ. 5:187-196(1994).
                                                                                                                                                                                                                                                                                                                                                                                          Mersiyanova I.V., Perepelov A.V., Polyakov A.V., Sitn
Dadali E.L., Oparin R.B., Petrin A.N., Evgrafov O.V.;
"A new variant of Charcot Marie-Tooth disease type 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                            WARIANT CMT2E PRO-332.
MEDLINE-20307176; Pubm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Biochim.
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Mushynski W.;
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Y -> S (IN REF. 1).

Y -> I (IN REF. 1).

W -> K (IN REF. 1).

V -> L (IN REF. 2).

D -> H (IN REF. 1).

R -> A (IN REF. 1).
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filament gene family.";
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MEDLINE-85154583; F
Geisler N., Plessma
"The complete amin
neurofilament prot
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""" 182:47'
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01-OCT-1996 (Re
16-OCT-2001 (Re
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EMBL; S70309; AAD14057.1;
PIR; S07144; S07144.
Genew; HGNC:7739; NEFL.
                   FEBS

ይukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=9823;

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between the Swiss Institute of Bioinformatics and the EMBL
 SEQUENCE
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t light p
                                     lessmann U., Weber K.
amino acid sequence
protein (NF-L).";
2:475-478(1985).
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                                                                                                            PubMed=3920075;
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t L protein (68 kDa neu
polypeptide) (NF-L).
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TAIL, SUBDOMAIN B (ACIDIC).
O-LINKED (GLCNAC) (BY SIMILARITY).
O-LINKED (GLCNAC) (BY SIMILARITY).
EPITOPE (RECOGNIZED BY IF-SPECIFIC MONOCLONAL ANTIBODY).
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Pred. No.
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7A0F1ADD5BED22F6 CRC64;
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EMBO J. 2:1295-1302(1983).
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InterPro; IPRO01664; IF.
Pfam; PF00038; filament;
PROSITE; PS00226; IF; 1.
                                                                                                                                                                       NFL_BOVIN STANDARD; PRT; 554 AA.
P02548; P79127;
21-JUL-1986 (Rel. 01, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Neurofilament triplet L protein (68 kDa neurofilament
(Neurofilament light polypeptide) (NF-L) (Micro glutam
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Bovinae; Bos.
MCBI_TaxID-9913;
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                       STRAIN-Holstein; TIS:
Hill W.D., Zhang L.,
Submitted (FEB-1997)
                                                                                                                                                           protein).
 SEQUENCE OF
                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                            138
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OTHER NEURONAL COMPONENTS OR IONS.

MISCELLAMENUS FOR THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM
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y L., Balin B.J.
1997) to the EMB
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                           B.J., Sprinkle T.J.;
EMBL/GenBank/DDBJ databases
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COIL 2B.
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TAIL, SUBDOMAIN B (ACIDIC).
O-LINKED (GLCNAC) (BY SIMILARITY).
O-LINKED (GLCNAC) (BY SIMILARITY).
EPITOPE (RECOGNIZED BY IF-SPECIFIC MONOCLONAL ANTIBODY).
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FEBS Lett. 182:389-392(1985).
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the neurofilament 68-kDa
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Isobe T., Okuyama
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                                                                                         YP24_RTBVP STANDARD; PRT; 199 AA.
p27500; p27530;
01-AUG-1992 (Rel. 23, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
01-NOV-1995 (Rel. 32, Last annotation update)
Hypothetical 24 kDa protein (P24) (ORF 1).
Rice tungro bacilliform virus (isolate Philippines)
Viruses; Retroid viruses; Caulimoviridae;
Rice tungro bacilli-form-like viruses.
Rice tungro bacilli-form-like viruses.
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                                                           NCBI_TaxID-10655;
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OTHER NEURONAL COMPONENTS OR IONS.
MISCELLANGOUS: NF-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM
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EQEIRDLR 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PF00038; filament; 1.
TE; PS00226; IF; 1.
mediate filament; Coiled
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8; Conserv
FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IPR001664; IF.
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ROD (BY SIMILARITY).
TAIL (BY SIMILARITY).
COIL 1A.
LINKER 1.
COIL 2A.
LINKER 2.
COIL 2A.
LINKER 2.
COIL 2B.
TAIL, SUBDOMAIN A.
TAIL, SUBDOMAIN B (ACII
MISSING (IN REF. 2).
A. S. A. A. A. C. (IN REF. 2).
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Pred. No.
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Query Match
Best Local S
Matches 7
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CONFLICT 1 1
CONFLICT 95 95
SEQUENCE 199 AA; 236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EM the European Bioinformatics Institute. There are no restruse by non-profit institutions as long as its content modified and this statement is not removed. Usage by and entities requires a license agreement (See http://www.isb-s or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE-92024093; PubMed-1926781;
Qu R.D., Bhattacharyya M., Laco G.S.,
Kaniewska M.B., Elmer J.S., Rochester
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hay J.M.,
Hull R.;
                                                                                                                                                    Modaressi S., Christ B., Bratke J., Zahn S., I "Molecular cloning, sequencing and expression mitochondrial form of phosphoenolpyruvate cart
                                                                                                                                                                                                                                                                    Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                       Q16822; Q43253; Q9BV62;
15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Phosphoenolpyruvate carboxykinase, mitochondrial precursor
(EC 4.1.1.32) (Phosphoenolpyruvate carboxylase) (PEPCK-M).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nucleic Acids Res.
                                                                                                                                                                                                                           SEQUENCE FROM N.A.
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                                       Modaressi S., Brechtel K., Christ B., Jungermann K.;
"Human mitochondrial phosphoenolpyruvate carboxykinase ;
Structure, chromosomal localization and tissue-specific
                                                                               SEQUENCE FROM N.A.
MEDLINE-98324897;
                                                                                                                                                                                                MEDLINE-96220691; PubMed-8645161;
                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                            PPCM_HUMAN
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 SEQUENCE FROM N.A
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M65026; -; NOT_ANNO
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                             333:359-366(1998).
                                                                                                                            315:807-814(1996).
                                                                                                                                                                                                                                                                                                (Human)
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                                                                                PubMed-9657976;
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19:2615-2621(1991).
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Primates;
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Pred. No. 4.6;
1; Mismatches
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                                                                                                                                                                                                                                                                    Craniata; Vertebrata; Catarrhini; Hominidae;
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-> S (IN REF. 2).
14B38C6C64E80746 CRC64;
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D.E., Smith C.
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virus a
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                                                                                                                                                     S., Heise T., Jungermann ssion of the cDNA of the carboxykinase from human
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                                                                                                                                                                                                                                                                       Hominidae;
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and caulimovi
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RESULT 8
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Best Local S
Matches 6
                                  MEDLING COWA
Balcarek J.M., Cowa
"Structure of the m
                                                                                                                                                                                                                                                                23-OCT-1986 (Rel.
01-OCT-1993 (Rel.
16-OCT-2001 (Rel.
Glial fibrillary
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CONFLICT
SEQUENCE
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NP_BIND
ACT_SITE
CONFLICT
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TRANSIT
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EMBL; Y11484; CAA72272.1; -.
EMBL; BC001454; AAH01454.1;
SWISS-2DPAGE; Q16022; HUMAN.
Genew; HGNC:8725; PCK2.
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Submitted (
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                                                                                                                                                             Mus musculus (Mouse).
Eukaryota; Metazoa; C
Mammalia; Eutheria; R
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MIM; 261650;
                     family
                                                                                                   SEQUENCE FROM N.A.
MEDLINE-85297756; PubMed-2994002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gluconeogenesis;
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SUBCELLULAR LOCATION: Mitochondrial.
DISEASE: DEFECTS IN PCK2 ARE A CAUSE OF
MISCELLANEOUS: IN EUKARYOTES THERE ARE T
ONE AND A MITOCHONDRIAL ONE.
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  Acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity 75.06; Conservative
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peptide; Manganese.
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(Rel. 27, Last sequence update)
(Rel. 40, Last annotation update)
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                                                                                 Cowan
                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
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                                      mouse glial fibrillary acidic protein gene
the evolution of the intermediate filament
                                                                                                                                                                                     Chordata;
Rodentia;
                                                                                 N. J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   92.3%;
75.0%;
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GTP
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GTP (POTENTIAL).
BY SIMILARITY.
R -> C (IN REF. 1).
ALC -> RYV (IN REF. 3).
R -> S (IN REF. 3).
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+ oxaloacetate = GDP + phosp
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Pred.
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PHOSPHOENOLPYRUVATE CARBOXYKINASE.
                                                                                                                                                                                   Craniata; Vertebrata;
Sciurognathi; Muridae
                                                                                                                                                                                                                                                                                                                                                                            PRT;
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Best Local 9
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"Identification of two N-terminal non-alpha-helical domain motifs
important in the assembly of gilal fibrillary acidic protein.";
J. Cell Sci. 107:1935-1948(1994).

-I. FUNCTION: GFAP, A CLASS-III INTERMEDIATE FILAMENT, IS A CELL-
SPECIFIC MARKER THAT, DURING THE DEVELOPMENT OF THE CENTRAL
NERWOUS SYSTEM, DISTINGUISHES ASTROCYTES FROM OTHER GLIAL CELLS.
-I. SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY.
                                                                                                             CONFLICT
                                                                                                                                                  DOMAIN
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                                                                                                                                                                                                           DOMAIN
DOMAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIINE-90294716; PubMed-2163003;
Brenner M., Lampel K., Nakatani Y., Mill J., Banner C., Mear
Dohadwala M., Lipsky R., Freese E.;
"Characterization of human cDNA and genomic clones for glial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDILINE-86101618; PubMed-3866511;
Cowan N.J., Lewis S.A., Balcarek J.M., Kr
"Structural implications of a CDNA clone
fibrillary acidic protein.";
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Lewis S.A., Balcarek J.M., Krek V., Shelanski M., Cowan N.J.;
Rewis S.A., Balcarek J.M., Krek V., Shelanski M., Cowan N.J.;
Psequence of a cDNA clone encoding mouse glial fibrillary acidic protein: structural conservation of intermediate filaments.";
Proc. Natl. Acad. Sci. U.S.A. 81:2743-2746(1984).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   fibrillary acidic protein. Brain Res. Mol. Brain Res.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Proc. Natl. Acad. Sci. U.S.A.
[3]
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EEEVRDLR 209
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                                                     Similarity
6; Conserv
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COIL 2A.
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446554A65B82DFC9 CRC64;
                                                        Mismatches
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XNIF_XENLA
P35617;
01-JUN-1994
01-JUN-1994
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Q1-JUN-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -1- TISSUE SPECIFICITY: NERVOUS SYSTEM; IN AXONS IN THE PNS AND IN SMALL PERIKARYA IN THE DORSAL ROOT GANGLION.
-1- DEVELOPMENTAL STAGE: EXPRESSED IN AXONS OF EARLY DIFFERENTIATING NEURONS AS WELL AS IN THE ADDLIT NERVOUS SYSTEM.
-1- DOMAIN: THIS PROTEIN CONTAINS A CENTRAL ROD REGION CHARACTERISTIC OF IF PROTEINS BUT DISPLAYS DIVERGENT HEAD AND TAIL DOMAINS.
-1- SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Charnas L.R., Szaro 
"Identification and 
weight neuronal inte
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01-JUN-1994 (Rel. 29, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Low molecular weight neuronal intermediate fi
Xenopus laevis (African clawed frog)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; l
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea;
Xenopodinae; Xenopus.
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and developmental expression of a novel
intermediate filament protein expressed
                                                                STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ohara O.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa;
Archosauria; Aves;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Coturnix coturnix
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                                                                                                                                   DOMAIN
DOMAIN
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Ohara O., Gahara Y., Miyake T., Teraoka H.,
"Neurofilament defictency in quail caused by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE-93224534;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID-93934;
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                                                                                                                                                                                                                       Intermediate
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                                                              EQEIRDLR 8
                                               EQEIRELR 147
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                                                                                     Similarity
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                                                                                                                            398
1139
1398
235
273
398
                                                                              Conservative
                                                                                                                                                                                                                       filament;
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         STANDARD;
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a; Chordata; Craniata; Vertebrata; Euteleostomi;
; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                     62282
                                                                                       89.78;
87.5%;
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L protein (Neurofilament light polypeptide) (NF-
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COIL 1B.
LINKER 12.
COIL 2A.
LINKER 2.
COIL 2B.
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                                                                                              Score 35;
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          PRT;
                                                                                                            AIL, SUBDOMAIN A.
AIL, SUBDOMAIN B
9B957ABD8EBA7712
                                                                                                                                                                                                       oil; Neurone.
SIMILARITY.
AD (BY SIMILARITY).
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                                                                                                                                                                                               (BY SIMILARITY)
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           574
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SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MEDLINE-88158079; PubMed-3126495;
Tani K., Fujii H., Nagata S., Miwa S.;
"Human liver type pyruvate kinase: con
"Human liver type pyruvate kinase: con
the expression in mammalian cells.";
the expression Sci. U.S.A. 85:1792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-APR-1993 (Rel.
30-MAY-2000 (Rel.
15-JUN-2002 (Rel.
Pyruvate kinase,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE-87184521; PubMed-3566732;
Tani K., Fujii H., Tsutsumi H., Sukegawa J.,
Yoshida M.C., Noguchi T., Tanaka T., Miwa S.;
"Human liver type pyruvate kinase: cDNA cloni
assignment.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kanno H., Fujii H., Hirono A., Miwa S.;
"CDNA cloning of human R-type pyruvate kinase and identification single amino acid substitution (Thr384-->Met) affecting enzymatic stability in a pyruvate kinase variant (PK Tokyo) associated with hereditary hemolytic anemia.";
proc. Natl. Acad. Sci. U.S.A. 88:8218-8221(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (Human).

Metazoa; Chordata;
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PKLR OR PKL OR PK1.
update).";
Blood Cell
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Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                         Kanno H., Fujii H., Tsujino G., Miwa S.;
"Molecular basis of impaired pyruvate kinase isozyme coerythroid cells: a single amino acid substitution near site and decreased mRNA content of the R-type PK.";
Biochem. Biophys. Res. Commun. 192:46-52(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 470-574 FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                Biochem.
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                                                                                                                              REVIEW ON VARIANTS.

MEDLINE-97230013; PubMed-9075576;
Barcocian L., Bianchi P., Zanell
"Hematologically important mutati
                                                                                                                                                                                               Baronciani L., Bianchi P., Zanella A.; "Hematologically important mutations: Blood Cells Mol. Dis. 22:85-89(1996).
                                       REVIEW ON VARIANTS.
MEDLINE-99187977; PubMed-10087985;
Baronciani L., Bianchi P., Zanella A.;
"Hematologically important mutations:
                                                                                                                    update).
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MEDLINE=96400713; PubMed=8807089
                                                                                                                                                                                                                                                                                        "Mutations
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                                      Baronciani L., Bianchi
"Hematologically import
               Cells
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                                                                                                                                                                                                                                                                   in pyruvate kinase.";
7:1-6(1996).
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(Rel. 39, Last sequence update)
(Rel. 41, Last annotation update)
nase, isozymes R/L (EC 2.7.1.40) (
                                                                                                        Mol.
               Mol.
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important mutations: red
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                24:273-279(1998)
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Catarrhini; Hominidae;
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complete amino
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MEDLINE=92163106; PubMed=1536957;
Kanno H., Fujii H., Hirono A., Omine M., Miwa S.;
"Identical point mutations of the R-type pyruvate kinase (PK)
found in unrelated PK variants associated with hereditary hemcanemia.":
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bianchi P., Zanella A.;
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Blood 77:1871-1875(1991).
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Schroter W.;
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"Low substrate affinity of pyruvate kinase caused by a single amino acid substitution with hereditary hemolytic anemia.";
VARIANT CNSHA GLU-37.
MEDLINE-97245895; PubMed-9090535;
Beutler E., Westwood B., van Zwieten R.,
"G-to-T transition at cDNA nt 110 (K37Q)
kinase) gene is the molecular basis of a
                                                                                                                                                                                                                                                                                                                                                                                                                     VARIANT CNSHA AMISH HIS-479.
MEDLINE-94214145; PubMed-8161798;
Kanno H., Ballas S.K., Miwa S., F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VARIANTS CNSHA D-134; P-155; H-359; W-486; V-495 AND Q-510. MEDLINE-93248282; PubMed-8483951; Baronciani L., Beutler E.; Paronciani L., Beutler E.; Proc. Natl. Acad. Sci. U.S.A. 90:4324-4327(1993).
                                                                                                                                                                              "Baronciani L., Beutler E.;
"Molecular study of pyruvate kinase hereditary nonspherocytic hemolytic J. Clin. Invest. 95:1702-1709(1995).
                                                                                                                                                                                                                                                                 "Mutations in the pyruvate kinase L hemolytic anemia."; blood 83:2817-2822(1994).
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"Molecular abnormality of erythrocyte
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                                                                                                           Baronciani L., Westwood B., Beutler E.;
"Study of the molecular defects in pyruvate kinase
patients affected by hereditary nonspherocytic hemo
                                                                                                                                                                                                                              VARIANTS CNSHA E-331; A-341; K-393; MEDLINE-95221622; PubMed-7706479;
                                                                                                                                                                                                                                                                                                                                                                                                 the Amish
                                                                                                                                                                                                                                                                                                                                 MEDLINE-94235845; PubMed-8180378;
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                                                                                                                                                     VARIANTS CNSHA.
                                                                                        Invest.
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                                                                                         43:341A-341A(1995).
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                Roos D.;
in the PKLR (pyruva
case of hereditary
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kinase
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hemolytic anemia
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STANDARD; P Q07723; Q07724;

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Q07722; Q07721; Q07723; Q07724;
16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
15-OCT-2002 (Rel. 41, Last annotation update)
1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase
1-phosphatidylinositol-4,5-bisphosphate C-beta-4) (Fragn

erase beta (Fragment).

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Local Similarity

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                                                                                                                                                                        Bureo E., Vives Corrons J.L.;

"Molecular characterization of the
deficient Spanish patients.";
Br. J. Haematol. 103:377-382(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VARIANTS Q-172; Q-337; H-339; T-357; I-408; MEDLINE-99043610; PubMed-9827908; Zarza R., Alvarez R., Pujades A., Nomdedeu Remacha A., Sanchez J.M., Morey M., Cortes
                                                                                                                                                                                                                                                                                                                    MEDILINE-98141680; PubMed-9482576;
Pastore I., della Morte R., Frisso G., Alfinito F., Vitale D., Calise R.M., Ferraro F., Zagari A., Rotoli B., Salvatore F.;
"Novel mutations and structural implications in R-type pyruvate kinase-deficient patients from Southern Italy.";
Hum. Mutat. 11:127-134(1998).
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Bardakdjian-Michau J., Kister
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MEDLINE-21226334; PubMed-11328279;
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                                                                                                                                                                                                                                                                                                                                                                                                                              variant (Hb
                                                                                                                                                                                                                                                                                                                                                                                                                                        "A new sickle cell disease phenotype associating Hb S trait, pyruvate kinase deficiency (PK Conakry), and an alpha-2 glob
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Galacteros F.;
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                        Match
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                                                      ALTERNATIVE PRODUCTS: 2 ISOFORMS; L-TYPE AND R-TYPE (SH
ARE PRODUCED BY ALTERNATIVE SPLICING.
DISEASE: DEFECTS IN PKLR ARE THE MOST COMMON CAUSE OF C
HEREDITARY NONSPHEROCYTIC HEMOLYTIC ANNEMIA (CNSHA OR HN
GLYCOLYTIC ENIZYMES.
MISCELLANEOUS: THERE ARE 4 ISOZYMES OF PYRUVATE KINASE
L, R, MI AND M.L. L TYPE IS MAJOR ISOZYME IN THE LIVER,
IN RED CELLS, MI IS THE MAIN FORM IN MUSCLE, HEART AND
M2 IS FOUND IN EARLY FETAL TISSUES.
SIMILARITY: BELONGS TO THE PYRUVATE KINASE FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ed blood cell ATP.";
Mutat. 9:282-285(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                    t (Hb Conakry).";
Haematol. 103:950-956(1998).
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             89.7%;
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                35;
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me D., V
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Valentin
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Perez Lungmus G.,
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Query Match
Best Local S
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota;
Mammalia; I
Bovidae; Bo
                                                                                                                                                                                       ProDom;
SMART; S
SMART; S
                                                                                                                                                                                                                                                                                        InterPro;
InterPro;
                                                                                                                                                                                                                                                                                                            EMBL;
EMBL;
EMBL;
EMBL;
                                                                                                                                                                                                                                                                                                                                                                    This SWISS-PROT entry is copyright. It is produced between the Swiss Institute of Bioinformatics and the European Bioinformatics Institute. There are number by non-profit institutions as long as its comparited and this statement is not removed. Usage entitles requires a license agreement (See http://worsend an email to license@isb-sib.ch).
                                                                                                                                                        SMART; SM00239; C2; 1.
SMART; SM00148; PLCXC; 1.
SMART; SM00149; PLCYC; 1.
PROSITE; PS50004; C2_DOMAIN_2; 1.
PROSITE; PS50007; PIPLC_X_DOMAIN; 1.
PROSITE; PS50008; PIPLC_X_DOMAIN; 1.
                                                                                                                                                                                                                     PRINTS; PR00390; PHPHLIPASEC. ProDom; PD001202; PI_PLC_Y; 1
                                                                                                                                                 Hydrolase;
                                                                                                                                                                                                                                                                                InterPro;
                                                                                                 DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                             COFACTOR: Calcium.

ALTERNATIVE PRODUCTS: AT LEAST 4 ISOFORMS; IA, 1B (SHOWN HER ALTERNATIVE PRODUCED BY ALTERNATIVE SPLICING.

AND 2B; ARE PRODUCED BY ALTERNATIVE SPLICING.

TISSUE SPECIFICITY; PREFERENTIALLY EXPRESSED IN THE RETINA.

SIMILARITY: DOMAINS X AND Y ARE CONSERVED IN FOUR DIFFERENT OF PLC AND ARE ESSENTIAL FOR CATALYTIC ACTIVITY.

SIMILARITY: CONTAINS 1 C2 DOMAIN.
                                                                                                                                                                                                                                                                                                          1; L13936; AAA30699.1; -.
2; L13935; AAC37304.1; -.
2; L13937; AAA30700.1; -.
2; L13938; AAA30701.1; -.
2; P10688; 10AS.
                                                                                                                                                                                                                                        PF00388;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea
Bovinae; Bos.
 Similarity
7; Conserv
                                                                                                                                                                                                                                                                    IPR000008; C2.
IPR001192; PI_PLC.
IPR000909; PI_PLC_Xdom.
IPR001711; PI_PLC_Y.
                                                                                                                                                  Lipid
                               1 299
3 529
3 634
1164
211
104
383
383
383
383
383
                                                                                                                                                                                                                                       PI-PLC-Y; 1.
PI-PLC-X; 1.
                                                                                                                                        .icing.
                                                                                                                                                  degradation;
          87.2%;
                                      DOMAIN X.
DOMAIN Y.
C2 DOMAIN.
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
MISSING (IN ISOFORM 2A ANI
MISSING (IN ISOFORM 1A).
MISSING (IN ISOFORM 2A).
MISSING (IN ISOFORM 2A).
  0
           Score 34;
Pred. No.
                                                                                                                                                 Transducer; Phosphorylation; Calcium;
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                               moved. Usage by and fo
(See http://www.isb-sib.
            59;
                     ļ;
                                                                                                                                                                                                                                                                                                                                                                                                  its content
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                                                                                                                                                                                                                                                                                                                                                                                                                      and the EM
                     Length 1023
                                                                    2A AND
                                                                                                                                                                                                                                                                                                                                                                                                                9
                                          CRC64;
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                                                                       ISOFORM
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    Gaps
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RESULT
PIB4_HU
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RA DeLoukas P., Matthews L.H., Ashurst J., Burton J., Gilbert J.G.R., DeLoukas P., Matthews L.H., Ashurst J., Babbage A.K., Bagguley C.L., RA Deloukas P., Matthews L.H., Ashurst J., Beard L.M., Beare D.M., RA Bealey O.P., Bard K.F., Bates K.N., Beard L.M., Beare D.M., RA Bealey O.P., Bird C.P., Blakey S.E., Bridgeman A.M., Brown A.J., RA Beasley O.P., Burler R.P., Carder C., Carter N.P., RA Buck D., Burrill W.D., Butler R.P., Carder C., Carter N.P., RA Chapman J.C., Clamp M., Clark G., Clark L.N., Clark S.Y., Clee C.M., RA Chapman J.C., Clamp M., Clark G., Clark L.N., Clark S.Y., Clee C.M., RA Clegg S., Cobley V.E., Collier R.E., Conor R.E., Corby N.R., RA Clegg S., Cobley V.E., Collier R.E., Conor R.E., Corby N.R., RA Clegg S., Cobley V.E., Collier R.E., Conor R.E., Corby N.R., RA Clegg S., Cobley V.E., Collier R.E., Conor R.E., Corby N.R., RA Clegg S., Cobley V.E., Collier R.E., Conor R.E., Corby N.R., RA Clegg S., Cobley V.E., Collier R.E., Conor R.E., Corby N.R., RA Hundle G.J., Heath P.D., Ho S., Holden J.L., Howden P.J., RA Hummond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J., RA Hundle E., Hunt A.R., King A., Knights A., Laird G.K., Lewlor S., RA Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lewlor S., RA Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lewlor S., RA Maish V.L., Martin S.L., McConnachte L.J., McLay K., McMurray A.A., RA Milies S.A., Mistry D., Moore M.J.F., Mullikin J.C., Nickerson T., RA Milies S.A., Ramasy H., Scott C.E., Sehra H.K., Shownkeen R., Sims S., RA Swann R.M., Sycamore N., Taylor R., Tee L., Thomas D.M., Thorpe A., RA Williams L., Whittaker P., Willey D.L., Williams L., Williams S.A., RA Milies J., Waray P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S., RA Milies J., Waray P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PIB4_HUMAN STANDARD; PRT; 1175 AA.
Q15147; Q9UJQ2; Q9BQW5; Q9BQW6; Q9BQW8;
16-CCT_2001 (Rel. 40, Created)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
15-JUN-2002 (Rel. 41, Last annotation update)
1-phosphattdylinositol-4,5-bisphosphate phosphodiesterase
(EC 3.1.4.11) (PLC-beta-4) (Phospholipase C-beta-4).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alvarez R.A., Ghalayini A.J., Xu P., Hardcastle Rao P.N., Pettenati M.J., Anderson R.E., Bachr W "CDNA sequence and gene locus of the human retin specific phospholipase-C beta 4 (PLCB4)."; Genomics 29:53-61(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HUMAN
                                                                                                                                                                                                                                                       Nature 414,865-871(2001).

-I- FUNCTION: THE PRODUCTION OF THE SECOND MESSENGER MOLECULES DIACYLGLYCEROL (DAG) AND INOSITOL 1,4,5-TRISPHOSPHATE (IP3) DIACYLGLYCEROL (DAG) AND INOSITOL-SPECIFIC PHOSPHY MENTATED BY ACTIVATED PHOSPHATIOYLINOSITOL-SPECIFIC PHOSPHY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-96079091;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE-Retina
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              883
                                                                                                                                                                                                                                                                                                                                                        "The DNA
                                                                                                                                                                                                                                                                                                                                                                               Rogers
                COFACTOR: Calcium.

ALTERNATIVE PRODUCTS: At least 3 isoforms; 1, 2 (s a); are produced by alternative splicing.

TISSUE SPECIFICITY: PREFERENTIALLY EXPRESSED IN TH SIMILARITY: DOMAINS X AND Y ARE CONSERVED IN FOUR OF PLC AND ARE ESSENTIAL FOR CATALYTIC ACTIVITY.

SIMILARITY: CONTAINS 1 C2 DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EQEIRDL
                                                                                                                                                                                           MEDIATED BY ACTIVATED PHOSPHATIDYLINOSITOL-SPECIFIC PHOSPHOLIF C ENZYMES. THIS FORM HAS A ROLE IN RETINA SIGNAL TRANSDUCTION. CATALYTIC ACTIVITY: 1-phosphatidyl-10-myo-inositol 4,5-trisphosphate + H(2)0 = D-myo-inositol 1,4,5-trisphosphate +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EQEIRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FROM
                                                                                                                                                                                                                                                                                                                                                        sequence and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          s (Human).
Metazoa; Chordata; C
Metazoa; Primates; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 889
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PubMed=11780052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PubMed-8530101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISOFORM
                                                                                                                                                                                                                                                                                                                                                          comparative analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Craniata; Vertebrata;
Catarrhini; Hominidae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AND
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                                                                                              THE
                                                                                                                                      (shown
                                                                                                                                                                                                                                                                                                                                                               chromosome
                                                                       DIFFERENT
                                                                                                                                                                                                                                                                            PHOSPHOLIPASE
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                                                                                                                                                                RESULT 14
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Best Local S
Matches
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Pfam; PF00387; PI-PLC-Y; 1.

Pfam; PF00388; PI-PLC-X; 3.

PFO0388; PF00390; PHPHLIPASEC.

PFODOm; PF001202; PI_PLC_Y; 1.

SMART; SM00239; C2; 1.

SMART; SM00149; PLCXC; 1.

SMART; SM00149; PLCXC; 1.

PROSITE; PS50004; C2_DOMAIN_2; 1.

PROSITE; PS50008; PIPLC_X_DOMAIN; 1

PROSITE; PS50008; PIPLC_Y_DOMAIN; 1

PROSITE; PS50008; PIPLC_Y_DOMAIN; 1

PROSITE; PS50008; PIPLC_Y_DOMAIN; 1

PROSITE; PS50008; PIPLC_Y_DOMAIN; 1
                                                                                                                                                                                                                                                                                                                                                                                                   ACT_SITE
ACT_SITE
VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; L4
HSSP; P1
                                                                                                                                                                                                                                                                                            VARSPLIC
CONFLICT
CONFLICT
CONFLICT
CONFLICT
CONFLICT
SEQUENCE
Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
NCBI_TaxID=10116;
[1]
                                                                    PIB4_RAT STANDARD; PRT; 1175 AA.

90GW07; Q920G6; O88356;
16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase
(EC_3.1.4.11) (PLC-beta-4) (Phospholipase C-beta-4).
                                                                                                                                                                                                    1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; AL031652; CAA21068.1; -. EMBL; AL023805; CAC34525.1; -. EMBL; AL023805; CAC34527.1; -. EMBL; AL023805; CAC34528.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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InterPro; IPR0001192; PI_PLC.
InterPro; IPR00999; PI_PLC_Xdom.
InterPro; IPR001711; PI_PLC_Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Genew;
                                                                                                                                                                                                                                                                                                                                                                                          VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                        DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                   DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                               DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alternative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MIM; 600810;
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                                                                                                                                                                                                    EQEIRDL 1041
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P10688; 1DJX.
                                                                                                                                                                                                                                               h 87.2%;
Similarity 100.0%;
7; Conservative
                                                                                                                                                                                                                                                                                             1
447
757
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780
840
902
1175
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313 68
565 688 78
328 33
375 37
1154 16
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681
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328
375
153
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                                                                                                                                                                                                                                                                                          DOMAIN X.
DOMAIN Y.
C2 DOMAIN Y.
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.

MISSING (IN ISOFORM 1).
LAFMTNINGKIPVR -> MNNNWNVCFFLFCP
(IN ISOFORM 1).
MISSING (IN ISOFORM 3).
A -> P (IN REF. 1).
F -> L (IN REF. 1).
L -> P (IN REF. 1).
K -> T (IN REF. 1).
A -> P (IN REF. 1).
A -> P (IN REF. 1).
A -> P (IN REF. 1).
                                                                                                                                                                                                                                                Score 34; DB 1; Pred. No. 69; 0; Mismatches
                                                                                                                                                                                                                                                 0
                         Craniata; Vertebrata;
Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Transducer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  There are no restrictions ong as its content is in
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                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                         Length 1175;
                         Euteleostomi;
:: Murinae; Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ý
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and
                                                                                    beta
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DR InterPro; IPRO00008; C2.

DR InterPro; IPRO01192; PI_PLC_X

InterPro; IPR001192; PI_PLC_X

DR InterPro; IPR001192; PI_PLC_X

DR InterPro; IPR001192; PI_PLC_X

DR InterPro; IPR001711; PI_PLC_X

DR Pfam; PF00168; C2; 1

DR Pfam; PF00387; PI-PLC_Y; 1

DR Pfam; PF00388; PI-PLC_Y; 1

DR Pfam; PF00388; PI-PLC_Y; 1

DR PRINTS; PR00399; PI-PLC_Y; 1

DR SMART; SM00149; PLCYC; 1

DR SMART; SM00149; PLCYC; 1

PROSITE; PS50004; C2_DOMAIN; 1

PROSITE; PS50007; PTPLC_X_DOMAIN; 1

PROSITE; PS50008; PIPLC_Y_DOMAIN; 1

Hydrolase; Lipid degradation; Transducer; Alternative spliting
DOMAIN 313

DOMAIN 565

ACT_SITE 328

375

DOMAIN 565

ACT_SITE 375

375
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Biochim. Biophys. Acta 1444:55-60(1999).

-I- FUNCTION: THE PRODUCTION OF THE SECOND MESSENGER MOLECULES
DIACYLGLYCEROL (DAG) AND INOSITOL 1,4,5-TRISPHOSPHATE (IP3) IS
MEDIATED BY ACTIVATED PHOSPHATIDYLINOSITOL-SPECIFIC PHOSPHOLIPASE
C ENZYMES. THIS FORM HAS A ROLE IN RETINA SIGNAL TRANSDUCTION.

-I- CATALYTIC ACTIVITY: 1-phosphatidyl-1D-myo-inositol 4,5-
bisphosphate + H(2)0 - D-myo-inositol 1,4,5-trisphosphate +
diacylglycerol.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. (ISOFORM A).
STRAIN-Sprague-Dawley; TISSUE-Brain;
MEDLINE-94012687; PubMed-8407970;
Lee C.-W., Park D.J., Lee K.-H., Kim C.G.,
"Purification, molecular cloning, and seque
                                                                                                                                                                                                                                                                                                                                                                                      EMBL; L15556; AAK13557.1; -.
EMBL; U57836; AAD10403.1; -.
EMBL; AF031370; AAC98145.1;
EMBL; AF027571; AAC24984.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE-99132015; PubMed-9931434; Adamski F.M.; Timms K.M., Shieh B.H.; "A unique isoform of phospholipase Cb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kim M.J., Bahk Y.Y., Min D.S., Lee S.J., Ryu S.H., "Cloning of cDNA encoding rat phospholipase C-beta the phospholipase C.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN-Sprague-Dawley; TISSUE-BrownedLINE-93343926; PubMed-7688223; Kim M.J., Bahk Y.Y., Min D.S., Le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Biochem. Biophys. Res. Commun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALTERNATIVE PRODUCTS: 3 ISOFORMS; A (SHOWN HERE), B AND C; A PRODUCED BY ALTERNATIVE SPLICING.

PISSUE SPECIFICITY: PREFERENTIALLY EXPRESSED IN THE RETINA. SIMILARITY: DOMAINS X AND Y ARE CONSERVED IN FOUR DIFFERENT OF PLC AND ARE ESSENTIAL FOR CATALYTIC ACTIVITY.

SIMILARITY: CONTAINS 1 C2 DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chem. 268:21318-21327(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Calcium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISOFORM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N.A.
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                        DOMAIN Y.
DOMAIN Y.
C2 DOMAIN.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                       Transducer;
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                                                                                                                       Phosphorylation; Calcium;
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Best Local Similarity 100
Matches 7; Conservative
EMBL: X5153; CAA35912.1; -.
PIR: S09228; S09228.
InterPro: IPRO01664; IF.
Pfam; PF00038; filament; 1.
PROSITE; PS00226; IF; 1.
Intermediate filament; Coiled DOMAIN 101 405 F
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1035 EQEIRDL 1041
                                                                                                                                                                                                                                  This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TORCA STANDARD; PRT; 4
P33729;
01-NOV-1991 (Rel. 20, Created)
01-NOV-1991 (Rel. 20, Last sequence up
16-CCT-2001 (Rel. 40, Last annotation
Type III intermediate filament.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
MEDLINE-90245604; PubMed-2336376;
Frail D.E., Mudd J., Merlie J.P.;
"Nucleotide sequence of an interm
californica.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Torpedo californica (Pacific electric ray).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
Elasmobranchii; Squalea; Hypnosqualea; Pristiorajea; Batoidea;
Torpediniformes; Torpedinoidei; Torpedinidae; Torpedo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nucleic Acids Res. 18:1910-1910(1990).
-|- SIMILARITY: BELONGS TO THE INTERME
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NCBI_TaxID-7787;
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MISSING (IN ISOFORM B).
AKEMOOMVKLEAEMDRRPATVV -> LLKSCHAVSQTOGEG
DAADGEIGSRDGPQTSNSSMKLQNAN (IN ISOFORM
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A (IN REF. 2).

K (IN REF. 2).

AA (IN REF. 2).

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L (IN REF. 2).

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Search completed: November 13, 2002, 13:16:55 Job time: 7.6383 secs
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Matches 6
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SEQUENCE
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458 AA;
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sp_unclassified:*
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Q86365
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64.134 Million cell updates/sec
Q8tcr7 homo sapien
Q8yqx8 rice tungro
Q9yrv6 rice tungro
Q9yqy4 rice tungro
Q80365 rice tungro
Q80365 rice tungro
Q80303 rice tungro
Q90303 rice tungro
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Q90303 rice tungro
Q90305 recyliorhinu
Q813x7 mus musculu
Q91310 mus musculu
Q91317 arabidopsis
Q96755 branchiosto
Q16715 homo sapien
Q16715 homo sapien
Q16715 homo sapien
Q16715 homo sapien
Q16716 drosophila
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3 34 87.2 1975 5 Q9VCD1 3 384.6 85 15 Q99DA2 5 33 84.6 85 15 Q99DA2 6 33 84.6 85 15 Q99DA2 7 33 84.6 85 15 Q99DA2 8 33 84.6 85 15 Q99DA2 9 33 84.6 85 15 Q99DA2 9 33 84.6 85 15 Q91144 9 33 84.6 85 15 Q91174 9 33 84.6 85 15 Q91178 1 33 84.6 85 15 Q91278 9 33 84.6 85 15 Q90DA2 1 33 84.6 199 12 Q9YRV9 1 33 84.6 199 12 Q9YRV9 1 33 84.6 415 9 Q8SDK8 1 33 84.6 425 5 Q9YRD7 2 33 84.6 425 5 Q9YRD7 3 3 84.6 425 5 Q9YRD7 3 3 84.6 1212 5 Q9YRZ26 4 33 84.6 1212 5 Q9YRZ26 4 34 54 54 54 54 54 54 54 54 54 54 54 54 54		87.2 87.2 87.2	231 467 497 605 781		Q9KBW6 Q96VC3 Q9P3C2 Q8Y270 Q8Y0R5 Q91UZ1
33 84.6 85 15 09DA2 33 84.6 85 15 09DA2 33 84.6 85 15 09D2 33 84.6 85 15 091142 33 84.6 85 15 091154 33 84.6 85 15 091160 33 84.6 85 15 0919R4 33 84.6 85 15 0909R4 33 84.6 85 15 090YR9 33 84.6 85 15 090YR9 33 84.6 15 10 09YRY9 33 84.6 415 9 08CDK8 34 6 415 9 08CDK8 35 84.6 415 9 08CDK8 36 84.6 415 9 08CDK8 37 84.6 415 9 08CDK8 38 84.6 415 9 08CDK8 39 84.6 415 9 08CDK8	ω ω ·	87.2 84.6	1975 84		Q9VCD1 091182
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33 84.6 415 9 080046 33 84.6 415 9 08SDK8 33 84.6 435 5 095SS5 33 84.6 450 13 09DDB3 33 84.6 455 5 09V8D7 33 84.6 455 5 09V8Z371 33 84.6 1212 5 09XZ29 33 84.6 1678 5 09WF26	ω	84.6	386		062003
33 84.6 415 9 08SDK8 33 84.6 435 5 09SSS5 33 84.6 450 13 09DDB3 33 84.6 455 5 09V8D7 33 84.6 455 5 09V8D7 33 84.6 1212 5 09XE29 33 84.6 1678 5 09NF26	ω	84.6	415		080046
33 84.6 435 5 095855 33 84.6 450 13 09DDB3 33 84.6 455 5 09V8D7 33 84.6 914 10 024371 33 84.6 1212 5 09XE26 33 84.6 1678 5 Q9NE26	ω	84.6	415		QBSDK8
33 84.6 450 13 Q9DDB3 33 84.6 455 5 Q9V8D7 33 84.6 914 10 024371 33 84.6 1212 5 Q9XZ29 33 84.6 1678 5 Q9NF26	ω	84.6	435		Q95SS5
33 84.6 455 5 09V8D7 33 84.6 41 10 024371 33 84.6 1212 5 09XZ29 33 84.6 1678 5 Q9NF26	ω,	84.6	450		Q9DDB3
33 84.6 914 10 024371 33 84.6 1212 5 09X229 33 84.6 1678 5 Q9NF26	ω	84.6	455		Q9V8D7
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33 84.6 1678 5 Q9NF26	w	84.6	1212	Ç,	Q9XZ29
	ω	84.6	1678	G	Q9NF26

ALIGNMENTS

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RESULT
Q9WQX8
ID Q9
AC Q9
DT 01
DT 01
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Best Local Similarity '100.0%;
Matches 8; Conservative 0
Q9WQX8 PRELIMINARY;
Q9WQX8;
Q1-NOV-1999 (TrEMBLrel. 12,
Q1-NOV-1999 (TrEMBLrel. 12,
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TISSUE-ANYCDALA;

Wambutt R., Heubner D., Mewes H.W., Weil B., W
Submitted (MAR-2002) to the EMBL/GenBank/DDBJ
EMBL; AL713644; CAD28456.1; -
Hypothetical protein.

NON_TER
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01-UN-2002 (TrEMBLrel 21, Last sequence update)
01-UN-2002 (TrEMBLrel 21, Last annotation update)
Hypothetical 43.8 kDa protein (Fragment)
                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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27 EQEIRDLR 34
                                                                                                                                                                                                                                                                                                    386 AA; 43779 MW;
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Created)
Last sequence update)
Last annotation update)
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                                                                                                                                                                                                                               Score 39; DB 4; Length 386; Pred. No. 12; ; Mismatches 0; Indels
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RESULT 4
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ID Q9WQ
AC Q9WQ
DT 01-N
DT 01-N
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Matches 7
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Best Local Similarity
Matches. 7; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-99394699; PubMed-10466823;
Cabauatan P.Q., Melcher U., Ishikawa K., (
Koganezwa H., Azzam O.;
RSequence changes in six variants of rice
their phylogenetic relationships.";
J. Gen. Virol. 80:2229-2237(1999).
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Rice tungro bacilliform virus.
Viruses; Retroid viruses; Caulimoviridae;
Rice tungro bacilli-form-like viruses.
NCBI_TaxID=10654;
09WQY4;
09WQY4;
01-NOV-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rice tungro bacilliform virus.
Viruses; Retroid viruses; Caulimovirid
Rice tungro bacilli-form-like viruses.
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01-MAY-1999 (TrEMBLrel 10,
01-MAY-1999 (TrEMBLrel 10,
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199 AA;
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  (TrEMBLrel.
                                                                     PRELIMINARY;
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87.5%;
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Pred. No.
1; Mismatc
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Last sequence update)
Last annotation updat
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Pred. No.
    Created)
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Q86365
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              RESULT
Q8V6W2
ID Q8
AC Q8
DT 01
DT 01
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Best Local S
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01-NOV-1996
01-JAN-1999
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Q86365;
              Q8V6W2;
Q8V6W2;
Q1-MAR-2002
Q1-MAR-2002
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Rice tungro bacilliform virus.
Viruses; Retroid viruses; Caulimovirid
Rice tungro bacilli-form-like viruses.
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Koganezawa H., Azzam O.;
Submitted (DEC-198) to the
EMBL; AF113830; AAD30188.1;
NON_TER 1
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P24 (Fragment).
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"Sequence changes in six variants of their phylogenetic relationships.";
J. Gen. Virol. 80:2229-2237(1999).
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MEDLINE-99394699; PubMed-10466823;
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                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
MEDLINB=92238849; PubMed=1571015;
Mano H., Kofzumi M., Noda H., Hibino H.,
Cabauatan P.Q., Koganezawa H.;
"Nucleotide sequence of capsid protein ge
                                                                                                                                                                                                                                                                                                                                                                        24K polypeptide (Fragment).
Rice tungro bacilliform virus.
Viruses; Retroid viruses; Caulimoviridae;
Rice tungro bacilli-form-like viruses.
RCBI_TaxID-10654;
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(TrEMBLrel.
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O90303;
O1-NOV-1998 (TREMBLrel. 08, Created)
O1-CCT-2000 (TREMBLrel. 15, Last sequence upon the control of the control
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p24 (Fragment).
Rice tungro bacilliform virus.
Viruses; Retroid viruses; Caulimoviridae;
Rice tungro bacilli-form-like viruses.
NCBI_TaxID-10654;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           de Kochko A., Marmey P., Brizard J.P., Beachy Submitted (JUL-1998) to the EMBL/GenBank/DDBJ EMBL; AF076470; AAC27709.2; -
Hypothetical protein.
SEQUENCE 222 AA; 26460 MW; 95D805292B37600
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7; Conserve
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                                           3 (TrEMBLrel. 07, (3) (TrEMBLrel. 08, 13) (TrEMBLrel. 20, 1
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, Last sequence up
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Matches 6
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Submitted (FEB-2002) 1
Submitted APP 347;
AAH234
NON_TER 1
SEQUENCE 535 AA; 56
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--- SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FANEMBL; Y15064; CAA75347.1; ---
EMBL; Y15064; CAA75347.1; ---
EMBL; Y15064; CAA75347.1; ---
EMBL; PEONO38; filament; 1.
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Scyllorhinus stellaris.
Eukaryota; Metazoa; Chordata;
Elasmobranchii; Galeomorphii;
Scyllorhinidae; Scyllorhinus.
                     Q91210;
01-DEC-2001
01-DEC-2001
01-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OBR3X7:
O1-JUN-2002 (TrEMBLrel. 21, Created)
O1-JUN-2002 (TrEMBLrel. 21, Last sequence update)
O1-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Similar to RIKEN CDNA 9130022B02 gene (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROSITE; PS00226; IF; 1
Coiled coil; Intermediat
SEQUENCE 455 AA; 5223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Schultess J., Loebbecke Submitted (SEP-1998) to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE-MUSCLE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=68454;
[1]
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM
                                                                                                     Q91Z10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 140 EQEMRDLR 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                    6; Conserv
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X
  1 (TrEMBLrel. 19, Created)
1 (TrEMBLrel. 19, Last sequence update)
2 (TrEMBLrel. 20, Last annotation update)
phosphoenolpyruvate carboxykinase 2 (mit
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Intermediate
55 AA; 52230
                                                                                                                                                                                                                                                                                         Conservative
                                                                                                         PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                        2002) to the AAH23437.1;
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Rodentia;
                                                                                                                                                                                                                                                                                                                                                                     58782 MW;
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MW; B330A2FCF895BCE9
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EMBL/GenBank/DDBJ (
                                                                                                                                                                                                                                                                                      Score 36; DB Pred. No. 64; 2; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Craniata; Vertebrata; Sciurognathi; Muridae;
                                                                                                             PRT;
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; Carcharhiniformes;
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                                                                                                                                                                                                                                                                                                                                   Length 535;
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; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FAMILY
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   RESULT 12
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Best Local
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Eukaryota; Metazoa; C
Mammalia; Eutheria; R
NCBI_TaxID=10090;
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Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; BC010318; AAH10318.1; -
Interpro; IPR000364; PEP_carboxykin.
Pfam; PF00821; PEPCK; 1.
ProDom; PB004738; PEP_carboxykin; 1.
PROSITE; PS004738; PEP_CK_CTP; UNKNOWN_1.
Kinase; Pyruvate.
Kinase; Pyruvate.
SEQUENCE 640 AA; 70494 MW; F1CA0E783D197E60 CRC64;
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01-MAR-2001 (TI
01-JUN-2001 (TI
Gb|AAD39572.1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Structural analysis of Arabidopsis thaliana c
sequence features of the regions of 1,013,767
physically assigned P1 and TAC clones.";
DNA Res. 5:297-308(1998).
EMBL; AB015479; BAB08571.1; -
InterPro; IPR003592; LRR_out.
SMART; SM00370; LRR; 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Arabidopsis thaliana (Mouse-ear cress).
Eukaryota; Viridiplantae; Streptcphyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosid
eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q9FJ57;
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O96755 PRELIMINARY; PRT; 422 AA.
096755;
01-MAY-1999 (TrEMBLrel. 10, Created)
01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-MAY-1999 (TrEMBLrel. 20, Last annotation update)
1ntermediate filament protein El.
1ntermediate filament protein El.
1sranchlostoma lanceolatum (Common lancelet) (Amphioxus).
1staryota; Metazoa; Chordata; Cephalochordata; Branchlostomidae;
1sranchlostoma.
                                                                                                                                                                                                                                                                                                                                                                                  1141
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MEDLINE-99087489;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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7; Conserv
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6; Conserv
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nilarity 75.0%;
Conservative :
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(TrEMBLrel. 16, Last sequence update)
(TrEMBLrel. 17, Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                            8
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S., Asamizu E.,
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Rodentia;
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77;
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7 bp covered
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Q16716
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SOURCE SERVING SOURCE S
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L DANA SEGG. 8:45-53(1997).

C -|- CATALYTIC ACTIVITY: ATP + PYRUVATE - ADP + PHOSPHOENO C -|- COFACTOR: REGUIRES MAGNESIUM AND POTASSIUM (BY SIMILA C -|- PATHMAX: FIGHAL STEP IN GLYCOLYSIS.

C -|- SIMULARITY: BELONGS TO THE PYRUVATE KINASE FAMILY. C -|- SIMILARITY: BELONGS TO THE PYRUVATE KINASE FAMILY. C -|- SIMILARITY: BELONGS TO THE PYRUVATE KINASE FAMILY. R PASP: 1AOF: R HSSP; P11974; 1AOF: R P11076; PR0001597; PYRUVATE_KINASE. R P1307; PR001509; PYRUVATE_KINASE; 1.

R P1307; PR01050; PYRUVATE_KINASE; UNKNOWN_1.

R PROSITE; PS00110; PYRUVATE_KINASE; UNKNOWN_1.

R PROSITE; PS00110; PYRUVATE_KINASE; 1.

PROSITE; PS0110; PYRUVATE_KINASE; 1.

PROSITE; PS0110; PYRUVATE_KINASE; 1.
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Best Local
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Matches
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"Homologues of vertebrate type I. II
(IF) proteins in an invertebrate: ti
cephalochordate Branchiostoma.";
FEBS Lett. 437:15-18(1998).
EMBL; AJ010294, CAA09068.1;
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InterPro; IPR002952; Eggshell.
InterPro; IPR002952; Eggshell.
InterPro; IPR001664; IF.
InterPro; IPR002957; Keratin_I.
pfam; PF00038; filament; 1.
                                                                                                                                                                              Query Match
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[1]
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Lenzner C., Nurnberg P., Jacobasch G., Thiele B.J.;
"Complete genomic sequence of the human PK-L/R-gene includes four intragenic polymorphisms defining different haplotype backgrounds normal and mutant PK-genes.";
DNA SC 0.15-5-71667.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (Human)
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRINTS; PRO1228; EGGSHELL.
PRINTS; PRO1248; TYPE1KERATIN.
SEQUENCE 422 AA; 44892 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                   SEQUENCE
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mer D., Erber A.,
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Primates;
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                                                                                                                         Score 35; DB Pred. No. 1.1e 2; Mismatches
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91852BC0DD24559E CRC64;
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and III intermediate
IF multigene family
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1.1e+02;
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                                                                                                                                                                                           Length 566;
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RESULT 14
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WEDLINE-98182887; PUDNed-9522120;

WEDLINE-98182887; PUDNed-9522120;

WEDLINE-98182887; PUDNed-9522120;

Complete genomic sequence of the human PR.L/R-gene includes four richragenic polymorphisms defining different haplotype backgrounds of rintragenic polymorphisms defining different haplotype defining dif
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Mammalla; Eutherla; Primates;
NCBI_TaxID=9606;
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01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation updat
Pyruvate kinase (EC 2.7.1.40) (PK) (Fragment).
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075758;
01-NOV-1998 (TrEMBLrel. 08, Created)
01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Pyruvate kinase (EC 2.7.1.40) (PK).
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NON_TER 1 1
SEQUENCE 587 AA; 63260 MW;
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SEQUENCE FROM N.A.

MEDLINE-93075125; PubMed=1445295;

MEDLINE-93075125; PubMed=1445295;

Kanno H., Fujii H., Miwa S.;

Identification of the promoter activity in Erythroid cells.";

Biochem. Biophys. Res. Commun. 188:516-523(1992).

-I- CATALYTIC ACTUTTY: ATP + PYMOVATE - ADP + PHOSPHOENOLPYRUVATE.

-I- COFACTOR: REQUIRES MAGNESIUM AND POTASSIUM (BY SIMILARITY).

-I- PATHMAY: FINAL STEP IN GLYCOLYSIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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6; Conserv
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pred. No. 1.1e+02;
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C -|- SIMILARITY: BELONGS TO THE PYRUVATE KINASE FAMILY.

R EMBL; D13243; BAA02515.1; JOINED.

R EMBL; D13234; BAA02515.1; JOINED.

R EMBL; D13234; BAA02515.1; JOINED.

R EMBL; D13235; BAA02515.1; JOINED.

R EMBL; D13236; BAA02515.1; JOINED.

R EMBL; D13236; BAA02515.1; JOINED.

R EMBL; D13237; BAA02515.1; JOINED.

R EMBL; D13237; BAA02515.1; JOINED.

R EMBL; D13239; BAA02515.1; JOINED.

R EMBL; D13240; BAA02515.1; JOINED.

R EMBL; D13241; BAA02515.1; JOINED.

R HSSP; P11974; JAQF.
                                                         Query Match
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Matches 6
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InterPro; IPR001697; P
Pfam; PF00224; PK; 1
Pfam; PF02887; PK_C; 1
                                                                                                                     Prodom; PD001009; Pyruvate_kinase; 1.
TIGREAMS; TIGRO1064; Pyruv_kin; 1.
PROSITE; PS00606; B_KETOACVI_SVITHASE; PROSITE; PS00110; PYRUVATE_KINASE; 1.
Glycolysis; Kinase; Magnesium; Transfer SEQUENCE 599 AA; 64502 MW; 29BCFF88
                                                                                                                                                                                                                Pfam; PF02887; PK_C; 1.
PRINTS; PR01050; PYRUVTKNASE.
   291 EQDVRDLR
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                                                           similarity
6; Conserv
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Pyruvate_kinase.
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75.0%;
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Pred.
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29BCFF812F1181A0 CRC64;
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score greater than or equal to the score of the result being prin
and is derived by analysis of the total score distribution.
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   Human polypeptide,
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Human Orc4Lp 47.3
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ALIGNMENTS

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XX WD1 Human; cow; myelin; myelin neurofilament; immunogen; antigen; bovine spongiform encephalopathy; BSE; multiple sclerosis; Creutzfeld-Jacob disease; CJD; demyelinating disease; diagnostic test. Test antigen #6 for spongiform and demyelinating disease diagnosis 17-OCT-2000 (first entry) AAB05930; AAB05930 standard; peptide; 6 AA 02-JUN-2000 WO200031545-A1 Bos taurus. Homo sapiens. Ebringer A; (UNLO) KING'S 26-NOV-1998; 25-NOV-1999; COLLEGE. 98GB-0025948 99WO-GB03936

Diagnosing spongiform or demyelinating disease in vertebrates such as bovine spongiform encephalopathy and Creutzfeld-Jacob disease comprises

WPI; 2000-400194/34.

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RESULT 2
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                            spongiform or demyelinating disease in vertebrates, including bovine spongiform encephalopathy (BSE), multiple sclerosis (MS) and Creutz/feld-Jacob disease (CJD). Peptides used in the kit are antigenic components of myelin or myelin neurofilaments. Biological samples are assayed for antibodies, especially IgA antibodies, which bind to myelin and/or myelin neurofilaments or an antigenic epetide, such as the present sequence. Any reading in excess of two standard deviations of
                                                                                                                                                                                                                                                                                                                                                   Diagnosing spongiform or demyelinating disease in vertebrates such as bovine spongiform encephalopathy and Creutzfeld-Jacob disease compris assaying a biological sample for myelin and/or myelin neurofilament
                                                                                                                                                                                          The present peptide may be used as a test antigen in a kit for diagnosing spongiform or demyelinating disease in vertebrates, including bovine
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feld-Jacob disease; CJD; demyelinating disease; diagnostic test.
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                          Diagnosing disease by detecting frameshift mutations in RNA or corresponding protein mutations - used to diagnose cancer and neurological diseases, particularly Alzheimer's disease, and also for treatment and prevention with specific ribozymes or wild-type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diabetes mellitus type II; microtubule associated protein; Tau; Big Taubiquitin B; apolipoprotein E; MAP2; neurofilament-L; neurofilament-M; neurofilament-F; presenilin I; presenilin II; cellular tumour antigen; glial fibrillary acidic protein; GFAP; p53; semaphorin III; HUPF-1; bcl-2; B-cell leukemia/lymphoma 2 proto-oncogene; HMGP-C; NSP-A; high mobility group protein-C; neuroendocrine specific protein A.
                                                                                                                                                                                                                                                                                                                                                      10-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; beta-amyloid precursor protein; beta-APP; diagnosis; cancer; frameshift mutation; age-related disease; neurodegenerative disorder; Alzheimer's disease; Down's syndrome; myotonic dystrophy; neuronal; Huntington's disease; multiple sclerosis; alcoholic liver disease;
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(ROYA-) ROYAL NETHERLANDS ACAD
(UYRO-) UNIV ROTTERDAM ERASMUS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human
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                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
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This invention describes a novel method for the diagnosis of a disease caused by, or associated with, an RNA molecule that has a frameshift mutation. The method is used to diagnose age-related diseases, especially cancer and a wide range of neurodegenerative disorders (e.g. Alzhelmer's disease, Down's syndrome, myotonic dystrophy, Huntington's disease, multiple sclerosis, alcoholic liver disease, diabetes mellitus type II and many others listed) or susceptibility to these disorders. The method allows a definitive diagnosis of Alzhelmer's disease in living pattents, at an early stage. It is based on the observation that disease may be caused by mutations in RNA rather than DNA. The invention describes the used of neuronal system RNA molecules, specifically proteins including beta-amyloid precursor protein (beta-APP), the microtubule associated proteins and and Rid Tau subdultin B. apolitoprotein E. microtubule

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Disclosure; Figure 7; 258pp; English

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11-JAN-2000;
02-MAY-2000;
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                                                                                                                                                                The invention relates to primers for synthesising full length cDNA clones. 830 cDNA molecules encoding a human protein have been applicated and nucleotide sequences of 5'- and 3'-ends of the cDNA molecules have been determined. Primers for synthesising the full length cDNA are useful for clarifying the function of the protein encoded by the cDNA. The full length clones were obtained by construction of full length enriched cDNA libraries that were synthesised by the oligo-capping method. The primers enable the production of the full length cDNA easily without any special methods. The present sequence is a polypeptide encoded by a full length human cDNA of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in CD-ROM format directly from EPO.
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su A, Sugiyama
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ma T, Nagai
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K, Kojima
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2.2e+02;
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Otsuki T, Koga
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                                                                                                                                                                                                                                                                                                                                                                          psf230 protein is administered to humans to prevent transmission of malaria by inducing a transmission blocking immune response. It can also be used to raise antibodies and for T and B cell epitope mapping. pfs230 induces a high and long-lasting antibody titer and can be produced in large amounts at low cost.
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N-PSDB; AAQ67190.
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Plasmodium falciparum; antimalaria; malaria;
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    chromosome 2;
protozoacide;
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infection; ins
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         cia parasite;
insecticide.
                                                       SEQ ID NO:80
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                           vaccine;
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CC vaccines against P. falciparum infection comprising (I) or (II).

CC P. falciparum infection: (I) and polycional antisers or a monoclonal comprising the sequences of (I), are comprising the sequences of (I), are comprising the sequences of (I), are compared to immunogens comprising the sequences of (I), are comprising the sequences of (I), are compared to the interest of interest or prevent P. falciparum furthermore, (I) (especially when they are rifins or secreted or membrane proteins) (CC can aid the identification of drugs to treat or prevent P. falciparum (I) (especially when they can be used to identify drug resistance in complexim. Sequencing of the Plasmodium chromosome 2 and the CC subsequent identification of proteins encoded by it will help to expand complexity of the parasite biology, a process hampered by the CC complexity of the parasite biology, and provide new targets for complexity of the parasite resistance to drugs and mosquito resistance to insecticides have led to a resurgence of malaria in many can be complexed and protein sequences given in the present invention, but which are not competitically mentioned within the specification.
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                                                                                                                                                                                                                                                                                                          2556 KKIHEE 2561
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-365347/31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hoffman S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (GARD/) GARDNER M.
(VENT/) VENTER J C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (HOFF/) HOFFMAN S.
(CARU/) CARUCCI D.
(GARD/) GARDNER M.
                                                                        Replication start codon initiation recognition compound; Orc4LP; HSORC4L; cancer; cytostatic: HIV infection; anti-HIV; virucide;
                                                                                                                                                            23-SEP-2002
                                                                                                                                                                                           ABB79475;
                                                                                                                                                                                                                           ABB79475 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                         Human Orc4Lp
                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                           1 KKVHEE 6
                                                            gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                         3135
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                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                          (first entry)
                                                                                                                           47.3 N-terminal
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                                                                                                                                                                                                                                                                                                                                                                                         96.9%;
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                                                                                                                                                                                                                             15
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                                                                                                                                                                                                                                                                                                                                                                                       Score 31;
Pred. No.
                                                                                                                           peptide fragment.
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                                                                                                                                                                                                                                                                                                                                                                           Mismatches
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. 2.1e+03;
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SQXCCCCCXXXIII
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Best Local Similarity
Matches 5; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to novel human replication start codon initiation recognition compound subunit Orc4Lp (HsORC4L) 47.3 (see ABB79474). This protein and its coding sequence are useful in the treatment of diseases such as cancer and HIV infection. The present sequence is an N-terminal peptide fragment of the protein, which was used in an example from the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CN1331153-A
                                                                                                                                                                                                                                                                                               AAG03533 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 5; Page 20 (Disclosure); 33pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Polypeptide-human replication start codon initiation recognition compound subunit Orc4Lp (HSORC4L)47.3 and polynucleotide for coding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mao
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                                                                                                                                                                                                                                                            06-OCT-2000
                                                                                                                                                                                                                                                                              AAG03533;
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                                                                                                                                                         06-SEP-2000
                                                                                                                                                                           EP1033401-A2
                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                               gene
                                                                                                                                                                                                                      Human; 5' EST;
                                                                                                                                                                                                                                        Human secreted protein, SEQ ID NO:
                                                     WPI; 2000-500381/45.
N-PSDB; AAC03539.
                                                                                                                    26-FEB-1999;
                                                                                                                                       21-FEB-2000; 2000EP-0200610
                                                                                 Dumas Milne Edwards
                                                                                                   (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                            10 KKLHEE 15
                                                                                                                                                                                                                                                                                                                                                       1 KKVHEE 6
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                                                                                                                                                                                                              therapy;
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                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                    AA;
                                                                                                                                                                                                              ; expressed sequence tag; secreted protein; cDNA isolation; chromosome mapping.
                                                                                                                    9905-0122487
                                                                                                                                                                                                                                                                                                Protein;
                                                                                  'n
                                                                                                                                                                                                                                                                                                                                                                                          90.6%;
                                                                                  Duclert A,
                                                                                                                                                                                                                                                                                                76
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                                                                                                                                                                                                                                                                                                                                                                                          NO ;
                                                                                                                                                                                                                                            7614
                                                                                   Giordano
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23;
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Claim 13; SEQ ID 7614; 71pp + CD-ROM; English

New nucleic acid that is a 5' expressed sequence tag (5' EST) obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and diagnostic, forensic, gene therapy and chromosome mapping prod

EST) for Is and for procedures

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ARESULT 9
AAM42110
ID AAM4
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AAC AAM4
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Best Local S
Matches 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence is a polypeptide encoded by one of a large number of 5' ESTs derived from mRNAs encoding secreted proteins. The 5' ESTs were prepared from total human RNAs or polyA+ RNAs derived from 30 different tissues. EST sequences usually correspond mainly to the 3' untranslated region (UTR) of the mRNA because they are often obtained from oligo-dT primed cDNA libraries. Such ESTs are not well suited for isolating cDNA sequences derived from the 5' ends of mRNAs and even in those cases where longer cDNA sequences have been obtained, the full 5' UTR is rarely included. 5' ESTs are derived from mRNAs with intact 5' ends and can therefore be used to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used in diagnostic, forensic, gene therapy and chromosome mapping procedures. They are used to obtain upstream regulatory sequences and to design expression and secretion vectors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation; leukaemia.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAM42110;
                                                Novel nucleic acids and polypeptides, useful such as central nervous system injuries -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-JAN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-AUG-2000;
                                                                                                                                                                                                                                                                                                              (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-APR-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 KKVHEE
                                                                                                                               2001-442253/47.
DB; AAI61266.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               eral nervous system; neuropathy;
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5; Conserv
                                                                                                                                                                                                            Liu C,
Wang Z,
Zhou P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             76 AA;
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2000US-0552317.

2000US-0598042.

2000US-0620312.

2000US-0623450.

2000US-0662191.

2000US-0693036.

2000US-0727344.
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                                                                                                                                                                                                            Asundi V,
Wehrman T,
Goodrich F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ
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Pred. No. 1.2e+02;
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                                                                                                                                                                                                              Chen R, Ma
Xu C, Xue
R, Drmanac R
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                                                                                       treating
                                                                                                                                                                                                                                            άχΒ,
                                                                                                                                                                                                                                          Ren F,
Zhang
                                                                                         disorders
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Example 2; SEQ ID

NO 7041; 10078pp; English.

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AAU29773
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Best Local S
Matches 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            assays
C.N.S c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; vaccination; gene therapy; nutritional supplement; stem cell proliferation; haematopoiesis; nerve tissue regeneration; immune suppression; immune stimulation; anti-inflammatory; leukaemia.
The invention relates to novel human secreted polypeptides. The polypeptides and antibodies to the polypeptides are useful for determining the presence of or predisposition to a disease associated with altered levels of polypeptide. The polypeptides are also useful for identifying agents (agonists and antagonists) that bind to them. Cells expressing the proteins are useful for identifying a therapeutic agent for use in treatment of a pathology related to aberrant expression or physiological interactions of the polypeptide. Vectors comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 specification.
                                                                                                                                                                                                                    WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAU29773;
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                                                                                                                                                                                                                                                                                                            18-APR-2000; 2000US-0552929.
26-JAN-2001; 2001US-0770160.
                                                                                                                                                                                                                                                                                                                                                         16-APR-2001; 2001WO-US08656
                                                                                                                                                                                                                                                                                                                                                                                                                    WO200179449-A2.
                                                                                                                                                                                    Nucleic acids encoding
                                                                                                                                                                                                                                                                                                                                                                                         25-OCT-2001
                                                                                                                                           Claim
                                                                                                                                                                       vaccination,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               106 KKLHEE 111
                                                                                                                                                                                                                                                                               (HYSE-)
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The sequence data for this patent did
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                                                                                                                                                                                                                      2001-611725/70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            human
                                                                                                                                         20; Page 192;
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                                                                                                                                                                                                                                                                               HYSEQ INC
                                                                                                                                                                                                                                                   Liu C,
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                                                                                                                                            765pp;
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                                                                                                                                                                    ng a range of human
and therapy -
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                                                                                                                                            English.
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Pred.
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No.
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3e+02;
                                                                                                                                                                                           polypeptides, useful in genetic
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the nucleic acids encoding the polypeptides and cells genetically engineered to express them are also useful for producing the proteins. The proteins are useful in genetic vaccination, testing and therapy, and can be used as nutritional supplements. They may be used to increase stem cell proliferation; to regulate haematopolesis; and in bone, cartilage, tendon and/or nerve tissue growth or regeneration; immune suppression and/or stimulation; as anti-inflammatory agents; and in treatment of leukaemias. AAU29510-AAU33304 represent the amino acid sequences of novel human secreted proteins of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; open reading frame; ORFX; detection; cytostatic; hepatotropic; vulnerary; antipsoriatic; antiparkinsonian; nootropic; neuroprotective; anticonvulsant; osteopathic; antiarthritic; immunosuppressant; cardiant; immunosuppressant; cardiant; immunosuppressant; cardiant; immunosuppressant; cardiant; immunosuppressant; cardiant; hypotensive; dermatological; immunosuppressive; antiinflammatory; hypotensive; dermatological; immunosuppressive; antiinflammatory; antianaemic; gene therapy; cancer; proliferative disorder; hyportension; neurodegenerative disorder; osteoarthritis; graft vs host disease; cardiovascular disease; diabetes mellitus; hypothayroidism; SCID; AIDS; cholesterol ester storage; systemic lupus erythematosus; infection; severe combined immunodeficiency; malaria; autoimmune disorder; asthma; allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound; hone damaco: artillar dam
                                                                                                                                                                                                                                                                                                                                                                   31-MAR-1999;
02-APR-1999;
05-APR-1999;
30-MAR-2000;
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                                                         Claim 11;
                                                                                                    Novel nucleic acids and peptides derived from open reading useful for treating e.g. cancers, proliferative disorders, neurodegenerative disorders and cardiovascular disease
                                                                                                                                                                                                                                                                         Shimkets RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAR-2000; 2000WO-US08621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-OCT-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    thrombosis; contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   106
       AAC74446 to AAC77606
                                                                                                                                                                                                                                                                                                                      (CURA-) CURAGEN CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 KKVHEE 6
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                                                                                                                                                                                                   2000-602362/57.
DB; AAC76489.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          damage; cartilage damage; antiinflammatory disease; coagulation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                         Page 3278;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORF2044 polypeptide sequence SEQ ID NO:4088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          189 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                   99US-0127607.
99US-0127636.
99US-0127728.
2000US-0540763.
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                                                                                                                                                                                                                                                                           Leach M;
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            encode
                                                         5507pp; English.
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Pred.
            the proteins given in AAB40237 to AAB43397,
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3e+02;
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cc antiporiatic; antiparkinsonian; noutropic; neuroprotective; costeopathic; anticonvulsant; antiarthritic; immunosuppressant; communostimulant; cardiant; thrombolytic; coagulant; vasotropic; cc antidiabetic; hypotensive; dermatological; immunosuppressive; cc antidiabetic; hypotensive; dermatological; immunosuppressive; cc antidiabetic; hypotensive; acrmatological; antifungal; antirheumatic; cc antidiplamatory; antibacterial; antiviral; antifungal; antirheumatic; cc antithyrold; and antianaemic. The sequences can be used for determining cc the presence of or predisposition to, or preventing or treating cc pathological conditions associated with an open-associated disorder. The cc pathological conditions associated with an open-associated disorder. The cc proliferative disorders, neurodegenerative disorders, osteoarthritis, cc proliferative disorders, neurodegenerative disorders, osteoarthritis, cc proliferative disorders, cardiovascular disease, diabetes mellitus, comparative disorders, osteoarthritis, cc proliferations, bypothyroidism, cholesterol ester storage, systemic lupus crythematosus, severe combined immunodeficiency (SCID), AIDS, viral, cc erythematosus, severe combined immunodeficiency (SCID), AIDS, viral, cc allergies, aplastic anaemia, burns, wounds, bone and cartilage damage, cc allergies, aplastic anaemia, burns, wounds, bone and cartilage damage, cc coagulation; to inhibit thrombosis; and as a contraceptive.
   CCCCCXXXX PT TTT TXXXXX PT XXXXX PT XXXX PT XXXXX PX XXXX PX XXX PX XXXX PX XXX PX XXXX PX XXXX PX XXXX PX XXXX PX XX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Replication start codon initiation recognition compound; Orc4LP; HsORC4L; cancer; cytostatic: HIV infection; anti-HIV; virucide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human Orc4Lp 47.3
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The present sequence is the protein sequence of novel human replication start codon initiation recognition compound subunit Orc4Lp (HsORC4L) 47.3. This protein and its coding sequence are useful in the treatment of diseases such as cancer and HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-JAN-2002
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                                                                                                                                                                                                                                                                      Polypeptide-human replication start codon initiation recognition compound subunit Orc4Lp (HsORC4L)47.3 and polynucleotide for coding
                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-352937/39
N-PSDB; ABN84122.
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                                                                                                                                                                        Claim 1; Page 28-29 (Disclosure); 33pp; Chinese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (BODE-) BODE GENE DEV CO LTD SHANGHAI.
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Pred. No. 5.1e+02;
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RESULT 13
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RESULT 14
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06-SEP-1996;
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                                                                                                                                                                                                                                                                                                                                                                                            proteins AAW54349-W54364 are examples of proteins produced in the endometrium during the hyperplasia, adenocarcinoma or proliferative phase of the endometrium. The presence and quantities of these proteins can be detected using 2D gel electrophoresis comparison of cell lysates. The proteins can be used as biochemical markers to detect the phase of the endometrium and can be measured in body fluids, obviating the need for endometrial biopsies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Biochemical markers of human endometrium - useful diagnosis of hyperplasia and adenocarcinoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1998-207057/18
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2D gel electrophoresis; detection.
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||:|||
234 KKLHEE 239
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                           ABB77394;
                                                                    ABB77394 standard;
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96GB-0018600.
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                                                                    protein;
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1; Mismatches
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6.9e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to in vitro methods for the detection of skin stress and/or skin ageing in humans and animals based on the determination of spondin 2, cathepsin L, actin gamma 1 or vimentin fragments secreted by fibroblast from the skin under test. Use of the methods in a test for potential cosmetics and pharmaceuticals with an effect on these skin conditions and products containing vimentin fragments are also included. Products containing vimentin fragments effective in the regulation, especially maintenance, of skin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      actin gamma 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    In vitro assays for skin stress and skin ageing includes determination of spondin 2, cathepsin L, actin gamma 1 and vimentin fragments secreted by skin fibroblasts \,\,^{\circ}
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                                                                                                                                                               Human; pollinosis-associated gene 795; vimentin homologue; IgE; immunoglobulin E; cedar pollen allergy; T-cell; reduced detection; diagnosis; drug screening; allergic disease.
                                                                                                                                                                                                                                                                                                                                                                               AAB29635 standard; Protein; 466 AA
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26-APR-2000; 2000WO-JP02734
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                                                                                                                           Homo sapiens
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Pred. No. 7.4e+02;
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27-APR-1999;

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SXCCCCCCCCCCCCCCCCCXXXTTTTXXXIII cc exhibits significantly reduced expression in the T-cells of individuals could high cedar pollen-specific IgE (Annunoglobulin E) levels. The gene was isolated from T-cells from individuals allergic to cedar pollen using the differential display method. Pollinosis-associated gene 795 has commonly with the human vimentin gene. The invention also relates also relates to the protein encoded by pollinosis gene 795; to expression constructs and host cells comprising pollinosis-associated gene 795 primers and probes; constitudies against the protein encoded by the gene; methods of detection of pollinosis-associated gene 795 nucleic acids; and a method of constructs of allergic diseases via the detection of pollinosis-associated gene 795 nucleic acids; and a method of control gray the expression of pollinosis-associated gene 795 in pollen contigen-stimulated T-cells in the presence of a test compound relative to a control. Pollinosis-associated gene 795 is useful in the diagnosis of control generation of such diseases. The present sequence represents a protein encoded by human pollinosis-associated gene 795. S B Query Match Best Local Similarity Matches 5; Conserv Nagasu T, Sugita Y, Obayashi I, Imai Y, Yokoi A; Pollinosis-associated gene 795 undergoing significantly low expression in subjects with high cedar pollen-specific IgE levels, useful in diagnosis of allergic diseases and screening drug candidates WPI; 2000-687343/67. N-PSDB; AAC64226. Page 64-67; Claim 13; 73pp; Japanese. (GENO-) GENOX RES INC. (EISA) EISAI CO LTD. Sequence 235 KKLHEE 240 1 KKVHEE 6 466 AA; Conservative 90.6%; Kashiwabara T, Oshida T, Obayashi M, Gunji S; Yoshida N, Ogawa K, Matsui K, Takahashi E; Score 29; DB 21; Length 466; Pred. No. 7.4e+02; 1; Mismatches 0; Indels 0; Gaps 0,

Search completed: November 13, 2002, 13:22:10 Job time: 30.7447 secs

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XX Bos taurus. Homo sapiens. Human; cow; myelin; myelin neurofilament; immunogen; antigen; bovine spongiform encephalopathy; BSE; multiple sclerosis; Creutzfeld-Jacob disease; CJD; demyelinating disease; diagnostic test. Ebringer A; 26-NOV-1998; 25-NOV-1999; 02-JUN-2000. WO200031545-A1 Test antigen #1 for spongiform and demyelinating disease diagnosis. 17-OCT-2000 (first entry) (UNLO) KING'S COLLEGE 98GB-0025948 99WO-GB03936

Diagnosing spongiform or demyelinating disease in vertebrates such as bovine spongiform encephalopathy and Creutzfeld-Jacob disease comprises

WPI; 2000-400194/34.

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RESULT
AAG0213
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Matches 6
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The present sequence is a polypeptide encoded by one of a large number of 5' ESTs derived from mRNAs encoding secreted proteins. The 5' ESTs were prepared from total human RNAs or polyA+ RNAs derived from 30 different tissues. EST sequences usually correspond mainly to the 3' untranslated region (UTR) of the mRNA because they are often obtained from oligo-dT primed cDNA libraries. Such ESTs are not well suited for isolating cDNA sequences derived from the 5' ends of mRNAs and even in those cases where longer cDNA sequences have been obtained, the full 5' UTR is rarely included. 5' ESTs are derived from mRNAs with intact 5' ends and can therefore be used to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used in diagnostic, forensic, gene therapy and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                assaying a biological sample for antibodies -
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thes 0;
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This sequence represents Serratia marcescens translation initiation of factor IF3. IF3 is an essential factor, acting to prevent association of ribosomal subunits and to recognise the correct initiation codon. IF3 can be used as a drug target for potential antibiotics. The convention relates to methods for screening for test compounds that inhibit the activity of IF3 which comprise using a reporter gene convention initiation at an atypical start codon of the convention translation initiation at an atypical start codon of the compounts translation initiation at an atypical start codon of the compounts which compounts which compounts which care effective at inhibiting IF3 of one bacterial species will have an conhibitory effect on the IF3 or its functional equivalents in a wide can bacterial inflation. As a result, the potential toxicity of IF3 inhibitors is likely to be low. Compounds identified by the method that inhibit consisting the specially for treating an infectious disease in a human or a companion or livestock animal. The compound may be adjunctively administered with a second antibacterial compound. IF3 inhibitors identified by the method are also useful for sterilising bacteria-contaminated objects or material. The compound is infectious disease in a human or a companion or investock animal. The compound may be adjunctively administered with a second antibacterial compound. IF3 inhibitors identified by the method are also useful for sterilising bacteria-contaminated objects or material. The compounds identified can penetrate and specifically compounds in a compound in a compo
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ubiquitous; conserved; broad spectrum; infection; contamination;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Fig 1; 66pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-620242/53.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Serratia marcescens.
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tion codon;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Protein identification; signal transduction pathway; metabolic pathway; hybridisation assay; genetic mapping; gene expression control; promoter; termination sequence.
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Similarity 100.0%;
6; Conservative 0;
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990S-0127462

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09-AUG-1999;
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990S-0158232

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             AAG44372;
                                                                                                                                                                                                       The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from at ftp.wipo.int/pub/published_pct_sequences.
                                  AAG44372 standard;
                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                Disclosure; SEQ
                                                                                                                                                                                                                                                                                                                                                                     New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signalling and cell-cell interactions - \,
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N-PSDB; ABL05509.
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11-JUL-2000; 2000US-0614150
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9US-01479 9US-014831 9US-014834 9US-014836 9US-014836 9US-014936 9US-014917 9US-014917 9US-014912 9US-014912 9US-014913 9US-014913 9US-014913	908-014514 908-014514 908-014527 908-014527 908-014527 908-014591 908-014591 908-014591 908-014638 908-014700 908-01471 908-01471 908-01471 908-01471 908-01471	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	9US-013976 9US-013981 9US-013989 9US-014035 9US-014035 9US-014069 9US-014108 9US-014108 9US-014128 9US-014215 9US-014215 9US-014215

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Matches 6
                       Herbicidally active polypeptide SEQ ID NO 552.
                                    31-MAY-2002
                                               ABB91341;
Arabidopsis thaliana
           Herbicidal; plant; agriculture; herbicide
                                                          ABB91341 standard;
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AAG44371
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                                                                             EP1033405-A2
                                                                                                                            Arabidopsis
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                                                                                                                                                    AAG44371;
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Query Match
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                                                                                                 The invention relates to identifying target proteins (ABB90790-ABB94016) for herbicidally active compounds, comprising aligning and comparing nucleic acid or amino acid sequences from plant with nucleic acid or amino acid sequences from non-plant organisms using suitable search parameters, where plant sequences having an E-value greater by a factor of 3 than the E-value of most similar non-plant sequences are selected. The polypeptides or nucleic acids encoding them are useful for identifying modulators. The identified modulators are
                                                                                                                                                                                                                                                                       Identifying plant target proteins for herbicidally active compounds, comprising aligning and comparing nucleic acid or amino acid sequences from plant with nucleic acid or amino acid sequences from non-plant organisms -
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(first entry)

thaliana protein fragment SEQ ID ö

Protein identification; signal transduction pathway; metabolic hybridisation assay; genetic mapping; gene expression control; termination sequence. pathway;
promoter;

Arabidopsis thaliana

2000EP-0301439.

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The present invention is related to a Lactococcus lactis nucleotide sequence (ABA90521) and related proteins (ABB53300-ABB55621). The nucleic acid sequence is useful in the detection and/or amplification nucleic acid sequence, particularly to identify Lactococcus lactis or
                                                                                                                                                                                                                                                               (INRG
                                                                                                Claim
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disease, multiple

This invention describes a novel method for the diagnosis of a caused by, or associated with, an RNA molecule that has a frame mutation. The method is used to diagnose age-related diseases, cancer and a wide range of neurodegenerative disorders (e.g. Al disease, Down's syndrome, myotonic dystrophy, Huntington's distance.

of a disease frameshift

disease, s, especially Alzheimer's

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Diagnosing disease by corresponding protein meurological diseases, for treatment and preve

e by detecting frameshift mutations in RNA or tein mutations - used to diagnose cancer and ases, particularly Alzheimer's disease, and also prevention with specific ribozymes or wild-type

Disclosure;

Figure

258pp;

English

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RESULT ID ANY 2061 AN
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Note: The sequence data for this patent is based on equivalent patent WO200177334 (published 18-OCT-2001) which is available in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
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The invention relates to primers for synthesising full length cDNA clones. 830 cDNA molecules encoding a human protein have been isolated and nucleotide sequences of 5'- and 3'-ends of the cDNA molecules have been determined. Primers for synthesising the full length cDNA are useful for clarifying the function of the protein encoded by the cDNA. The full length clones were obtained by construction of full length enriched cDNA libraries that were synthesised by the oligo-capping method. The primers enable the production of the full length cDNA easily without any special methods. The present sequence is a polypeptide encoded by a full length human cDNA of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in CD-ROM format directly from EPO.
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02-MAY-2000;
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tsu A, Sugiyama
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2000JP-0183765.
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K, Kojima
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S, Otsuki T, Ko
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10-DEC-1997;
31-DEC-1997;
30-JAN-1998;
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22-MAY-1998;
29-JUL-1998;
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                                                                 Porphorymonas gingivalis (PG) polypeptide sequences given in AAY34318 to AAX31802 to AAX91802 represent PCR primers used in the Isolation of the PG polypeptides. The PG polypeptides have antibacterial activity with a vaccine mechanism of action. The PG polypeptides can be used as vaccines especially against porphorymonas gingivalis. Probes can be used to detect porphorymonas gingivalis in standard hybridisation assays. Porphorymonas gingivalis is involved in periodontal disease
                                                                                                                                                                         Antigenic Porphorymonas gingivalis peptides gingivitis
                                                                                                                                                                                                      WPI; 1999-385613/32
N-PSDB; AAX91770.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Porphorymonas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Porphorymonas
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY34552;
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                                                                                                                                                                                                                                    Ross
                                                                                                                                                                                                                                                                                                                                                                                           10-DEC-1998;
                                      Sequence
                                                                                                                                                       Claim 1; Page 545-546; 588pp; English.
                                                                                                                                                                                                                                              Agius
                                                                                                                                                                                                                                                               (CSLC-) CSL
                                                                                                                                                                                                                                                                                                                         09-APR-1998;
                                                                                                                                     AAX91536 to AAX91801 encode two hundred
                                                                                                                                                                                                                                                                                                                23-APR-1998;
                                                                                                                                                                                                                                                                                                                                    LO-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            326 NEALEK
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24
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6; Conserv
h 100.0%;
Similarity 100.0%;
6; Conservative (
                                                        Porphorymonas
Lly gingivitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard;
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Rothel LJ,
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                                                                                                                                                                                                                                                                 LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            331
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gingivalis; PG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    gingivalis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gingivalis protein PG8
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98AU-0002264.
98AU-0002911.
98AU-0003128.
98AU-0003338.
98AU-0003654.
98AU-0004917.
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97AU-0000839
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Webb EA;
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           Score 29;
Pred. No.
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Pred.
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                                                                                                                                                                                                                                               Margetts
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           DB 20
4.3e+0
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                                                                                                                                      and sixty six antigenic
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                                                                                                                                                                                     preventing
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                    Length 550;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gingivitis;
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ARESULT 1:
AAY 34551
ID AAY 34551
AAY 3457
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AAY 467
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RESULT 14
AAY34417
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Best Local Similarity
Matches 6; Conser
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23-APR-1998;
05-MAY-1998;
22-MAY-1998;
29-JUL-1998;
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10-DEC-1997;
31-DEC-1997;
                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                       assays. Porphorymonas gingivalis is involved in especially gingivitis.
                                                                                                                                                                                                                                                                                                                                                                      AAX91836 to AAX91801 encode two hundred and sixty six antigenic Porphorymonas gingivalis (PG) polypeptide sequences given in AAY34318 to AAX34883. AAX91802 to AAX91999 represent PCR primers used in the 1solation of the PG polypeptides. The PG polypeptides have antibacterial activity with a vaccine mechanism of action. The PG polypeptides can be used as vaccines especially against Porphorymonas gingivalis. Probes can be used to detect Porphorymonas gingivalis in standard hybridisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Page 543-544; 588pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gingivitis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Agius
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antigenic Porphorymonas gingivalis peptides for preventing
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10-MAR-1998;
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NEALEK
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                                                                                             NEALEK 126
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Rothel LJ,
                                                                                                                                                                                                                                                                                  599
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98AU-0002264.
98AU-0002911.
98AU-0003128.
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98AU-0003654
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97AU-0001182
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Webb EA;
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                                                                                                                                                                                     Score 29; DB Pred. No. 4.7
); Mismatches
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4.7e+02;
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RESULT 15
ABB61598
ID ABB61
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AC ABB61
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DT 26-MA
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Best Local S
Matches 6
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10-DEC-1997;
31-DEC-1997;
30-JAN-1998;
                                                                                                                                                                                                                     Porphorymonas gingivalis (PG) polypeptide sequences given in AAY34318 to AAY34853. AAY31802 to AAX91899 represent PCR primers used in the isolation of the PG polypeptides. The PG polypeptides have antibacterial activity with a vaccine mechanism of action. The PG polypeptides can be used as vaccines especially against Porphorymonas gingivalis. Probes can be used to detect Porphorymonas gingivalis in standard hybridisation assays. Porphorymonas gingivalis is involved in periodontal disease especially gingivitis.
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05-MAY-1998;
22-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                  Antigenic Porphorymonas gingivalis peptides for preventing gingivitis
                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-385613/32.
N-PSDB; AAX91635.
                                                                                                                                                                                                                                                                                                                                                                                                                          Agius
                      26-MAR-2002
                                         ABB61598;
                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                               Claim 1; Page 389-390; 588pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Porphorymonas gingivalis; vaccine; antigenic.
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                                                              ABB61598 standard; Protein; 1151
                                                                                                                                                                                                                                                                                                           AAX91536 to AAX91801 encode two hundred and sixty six antigenic
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09-APR-1998;
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                                                                                                                                                         similarity 100.0%;
6; Conservative 0;
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Rothel LJ,
                                                                                                                                                                                                    614
                   (first entry)
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98AU-0002264.
98AU-0002911.
98AU-0003128.
98AU-0003338.
98AU-0003654.
98AU-0004917.
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Webb EA;
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                                                                                                                                                          Score 29; DE
Pred. No. 4.9
); Mismatches
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4.9e+02;
thes 0;
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Drosophila melanogaster polypeptide SEQ ID

NO 11586.

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Search completed: November 13, 2002, 13:22:04 Job time: 30.7447 secs
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Best Local Similarity
Matches 6; Conserva
                                                                                                                                                                                                                                                                               The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL10511), expressed DNA sequences (ABL106175) and the encoded proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Drosophila; developmental biology; cell signalling; insecticide; pharmaceutical.
                                                                                                                                                                                                                                 The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-SEP-2001.
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                                                                  1099 NEALEK 1104
                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; SEQ ID NO 11586; 21pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signalling and cell-cell interactions \boldsymbol{\cdot}
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N-PSDB; ABL05701.
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11-JUL-2000; 2000US-0614150.
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                                                                                     1 NEALEK 6
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                                                                                                                                  Conservative
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100.0%; F
tive 0;
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Pred. No. 9.4e+02;
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                                                                                                                                    Mismatches
                                                                                                                                    0,
                                                                                                                                                                   Length 1151;
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Result
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Maximum DB
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Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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seg length: 2000000000
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1: /cgn2_6/ptodata/1.
2: /cgn2_6/ptodata/1.
3: /cgn2_6/ptodata/1
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29
1 NEALEK 6
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Match
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Gapop 10.0 , Gapext 0.5
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20.336 Million cell updates/sec
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Copyright (c) 1993 - 2002 Compugen
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/cgn2_6/ptodata/1/laa/5B_COMB.pep:*
/cgn2_6/ptodata/1/laa/5B_COMB.pep:*
/cgn2_6/ptodata/1/laa/6B_COMB.pep:*
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/cgn2_6/ptodata/1/laa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/laa/backfiles1.pep:*
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                            US-08-477-396A-4
US-08-426-627-4
US-08-426-627-24
US-08-426-627-2
US-08-426-627-2
US-08-426-627-2
US-08-426-627-2
US-08-426-627-2
US-08-426-627-2
US-08-453-141-2
                                                                                                                                                                       US-09-134-001C-3754

US-08-353-476-71

US-08-353-476-71

US-09-134-001C-4571

US-09-262-473-12

US-08-484-105-8

US-08-484-105-8

US-08-484-105-8

US-08-484-105-8

US-08-484-105-8
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US-08-792-014-1
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US-08-961-083-218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUMMARIES
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                                                                                                                                                                                                                                                    Sequence 12, Appl
Sequence 15, Appl
Sequence 15, Appl
Sequence 2, Appl1
Sequence 3754, Ap
Sequence 71, Appl
Sequence 471, Ap
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12, Appl
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US-08-726-306A-183
 Query Match
Best Local S
Matches 6
   Similarity 6; Conserv
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US-08-159-339, US-08-159-339, US-08-865-5111, US-08-865-511, US-08-940-093, US-08-940-093, US-08-940-094, US-09-453-605, US-09-453-605, US-09-453-605, US-09-453-605, US-09-453-605, US-09-453-605, US-09-453-605, US-09-495, US-09-495, US-09-495, US-09-495, US-08-690-011, US-08-690-011, US-08-690-011, US-08-690-011, US-08-690-011, US-08-690-011	34	34	33	33	26	26	22	22	22	22	22	22	10	9	9	9	9	¥
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GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Van Leeuwen, Frederik Willem
APPLICANT: Burbach, Johannes Peter Henri
APPLICANT: Grosveld, Franklin G.
TITLE OF INVENTION: DIAGNOSIS METHOD AND REAGENTS
NUMBER OF SEQUENCES: 189
                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WOIDPERFECT 6.1

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/726,306A
FILING DATE: 02-Oct-1996

PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 95/20080.4
FILING DATE: 02-Oct-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/009,832
FILING DATE: 01-US 60/009,832
FILING
                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (617) 345-9111 INFORMATION FOR SEQ ID NO: 183:
                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 160 amino acids
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ZIP: 02111
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                                                                                                                                                  STRANDEDNESS:
                                                                                                                                                                                                         TYPE: amino acid
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Score 29; DB 2; Length 160; Pred. No. 18; ; Mismatches 0; Indels

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RESULT 3
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                                                                                           Sequence 1, Application US/09443948 Patent No. 6228616 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AFFLANCE ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
NAME: B1111ngs, Lucy J.
NAME: B111ngs, Lucy J.
REFIGRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-07
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TOPHONE: 415-855-5555
                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US, FILING DATE: Herewith CLASSIETCATION: 435
PRIOR APPLICATION DATA: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tent No.
                                                                                                                                                                                                                                                                                                                                                   IMMEDIATE SOURCE:
LIBRARY: Consens
CLONE: Consensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
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MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Bandman, Olga
APPLICANT: GOll, Surya K.
TITLE OF INVENTION: NOVEL
                                                                                                                                                                                                          137 NEALER 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    112 NEALEK 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM CO
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 3174 POI
CITY: Palo Alto
                                                                                                                                                                                                                                                                        Local Similarity 83.3
                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
                                                                                                                                                                                                                                         1 NEALEK 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
                            Gol1, Surya K.
TITLE OF INVENTION: NOVEL HUMAN ANION CHANNEL NUMBER OF SEQUENCES: 4
                                                                            APPLICANT: Bandman, Olga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    , Application US/08792014 6063594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CA
ADDRESSEE: Incyte Pharmaceuticals, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EE: Incyte Pharmaceuticals, Inc. 3174 Porter Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                  253 amino acids
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83.3%;
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Pred. No.
                                                                                                                                                                                                                                                                                          1.4e+02;
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LIBRARY: Consensus
CLONE: Consensus
SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-443-948-1
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Choi et. al.
TITLE OF INVENTION: Str
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                             SOFTWARE: ASCII Text
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/961,083
                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 137 NEALER 142
                                                                                                                                                                                                             STATE: Maryland
                                                                                                                                                                                                                              STREET: 9410 Key West Avenue CITY: Rockville
                                                FILING DATE:
                                                                                                                 OPERATING SYSTEM:
                                                                                                                              COMPUTER:
                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                 ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 08/792,014
FILING DATE: <UNKNOWN>
ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FRASESQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
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ZIP: 94304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/09/443,948 FILING DATE: 19-No. 6228616-1999 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 253 amino acids TYPE: amino acid
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                                                                                                                                                 Diskette,
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                                                                                                               MSDOS version 6.2
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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ATTORNEY/AGENT INFORMATION:

NAME: Brookes, A. A. REGISTRATION NUMBER:

Anders

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US-08-426-627-12
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Best Local :
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Patent No. 5756664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                       INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/426,627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (301) 309-8512 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tent No.
                                                                                                         TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4000
                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Hammond, Alan W.
REGISTRATION NUMBER: 35,:
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                              FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 565 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: (301) 309-8504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            357 NEAVEK 362
                                                                                                                                                                                                   APPLICATION NUMBER: US 08/036, FILING DATE: 25-MAR-1993 APPLICATION NUMBER: JP 4-71501 FILING DATE: 27-MAR-1992
   LECULE TYPE:
                                          ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Washington
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20005-3315
                             amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dunner
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peptide
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                                                                                                                                                                                                                                                US 08/036,841
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Pred. No.
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RESULT 7
US-08-426-627-15
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; ORGANISM: Mus musculus
US-08-426-627-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-743-200-10
                       Sequence 15, Applicati
Patent No. 5756664
GENERAL INFORMATION:
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Best Local Similarity
Matches .5; Conserv
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Best Local (
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INFORMATION FOR SEQ ID NO:
APPLICANT:
                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 37 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                   MOLECULE TYPE:
FRAGMENT TYPE:
                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08 FILING DATE: 05-NOV-1996 PRIOR APPLICATION DATA; APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Fasse, J. Pete REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                        STRANDEDNESS:
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ZIP: 02110-2804
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                                                                                                                                        1 NEALEK 6
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CITY: Boston
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                                                    Application US/08426627
                                                                                                                                                                                 Conservative
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MATION: Stephen J.

VENTION: DIAGNOSTIC METHODS FOR SCREENING

PATIENTS FOR SCLERODERMA
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                                                                                                                                                                                                                                                                                linear
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Pred. No.
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Pred. No. 13;
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Amann, Egon Otawara-Hamamoto, Yoko

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Best Local Similarity 83.3%;
Matches 5; Conservative
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                                                                                                                                                                                                                                                                               ENERAL INFORMATION:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                               ent No.
                                                                                                                                                           NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: PARTIE ADDRESSEE: Dunner ADDRESSEE: Dunner ADDRESSEE: 1300 I Street, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/036, ETLING DATE: 25-MAR-1993
APPLICATION NUMBER: JP 4-71501
FILING DATE: 27-MAR-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                        ITLE OF INVENTION: A NOVEL TUMOR MARKER AND NOVEL METHOD ITLE OF INVENTION: ISOLATING SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                   43 NEAFEK 48
                                                                                                                                            ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REGISTRATION NUMBER: 35,178
REFERENCE/DOCKET NUMBER: 02481-1285-00000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Hammond, Alan W. REGISTRATION NUMBER: 3
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5872235
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                                                                                                           Boston
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Liu, Yuan
                                                                                                                                                                                                                                                           Chen,
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Ability and Process
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Best Local Similarity
Watches 5; Conserv.
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                                                                                                                                                               SEQ ID NO 3754
LENGTH: 252
TYPE: PRT
                                                                                  Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/134,001C CURRENT FILING DATE: 1998-08-13 PRIOR APPLICATION NUMBER: US 60/064,964 PRIOR FILING DATE: 1997-11-08
                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: US 60/055,779 PRIOR FILING DATE: 1997-08-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (617) 451-0313 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 5674
                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Lynn Doucette-Stamm et al
                                                                                                                                                                                                                                                                                                                                 ILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                             TLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOLUMN OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
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30 NEALEE 35
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SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                Tocal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 08/146,488 FILING DATE: 29-OCT-1993
                                1 NEALEK 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PPLICATION NUMBER: PCT/
TLING DATE: 31-OCT-1994
                                                               Similarity
5; Conserv
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                                                                 Conservative
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Pred. No. 2.
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Pred. No.
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                                                                                              Length 252;
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RESULT 10 US-08-353-476-71

Sequence 71, Application US/08353476 Patent No. 5871902

SENERAL INFORMATION:

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                                                                ; ORGANISM: Staphylococcus epidermidis US-09-134-001C-4571
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US-08-353-476-71
                                                                                                       SEQ ID NO 4571
LENGTH: 399
TYPE: PRT
                                                                                                                                                                                                                       Sequence 4571, Application US/09134001C
Patent No. 6380370
GENERAL INFORMATION:
APPLICANT: Lynn Doucette-Stamm et al
APPLICANT: Lynn Doucette-Stamm et al
APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: GTC-007
CURRENT FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: US/09/134,001C
CURRENT FILING DATE: 1997-11-08
PRIOR APPLICATION NUMBER: US 60/054,964
PRIOR FILING DATE: 1997-11-08
Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Bencen, Gerard H
REGIZON NUMBER: 35,746
REFERENCE/DOCKET NUMBER: GP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (904) 375-8100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: METHOD OF DETECTION OF DNA WITH A TITLE OF INVENTION: SPECIFIC SEQUENCE COMPOSITION NUMBER OF SEQUENCES: 117
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 314 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 NEALEK 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NEALKK 72
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2421 N.W. 41st St., Suite A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
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Score 25;
Pred. No.
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent No. 5589341 GENERAL INFORMATION:
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Best Local :
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SEQ ID NO 12
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Patent No. 6218:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 8,
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APPLICANT: Cahoon,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/362,473 CURRENT FILING DATE: 1999-07-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Kinney, Anthony J.
TITLE OF INVENTION: Aromatic Amino Acid Catabolism Enzymes
FILE REFERENCE: BB-1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Rafalski, J. Ant
APPLICANT: Hitz, William D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS:
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                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: Patentin Release #1.0.
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            SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                  APPLICANT: GAVIN, Kimberly TITLE OF INVENTION: ORIGIN OF REPLICATION COMPLEX GENES NUMBER OF SEQUENCES: 24
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les 5; Conservative
                                                                                                                  COUNTRY: USA
ZIP: 94111-4187
                                                                                                                                                CITY: San Francisco
STATE: California
                                                                                                                                                                                                  ADDRESSEE:
APPLICATION NUMBER:
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FOSS, Margit
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                                                                                                                                                                                                                                                                                                  LAURENSON, Patricia
HERSKOWITZ, Ira
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                                                                                                                                                                                                                                                                                   Joachim J
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US/08/484,105
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Pred. No.
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                               Version #1.30
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Query Match
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; MOLECULE TYPE:
US-08-484-105-8
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 494-8700
TELEFAX: (415) 494-8771
TELEX: 910 277299
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
INFORMATION FOR SEO ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 529 Aminor
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                                                                        ATTORNEY/AGENT INFORMATION:
NAME: OSMAN Ph.D., RICHARD AION
REGISTRATION NUMBER: 36.627
REFERENCE/DOCKET NUMBER: 4.59032/DJB/RAO
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 494-8771
TELEPAX: (415) 494-8771
                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/484,106
                                                                                                                                                                                                                                                                                                          ZIP: 94111-4187
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: GAVIN, Kimberly
TITLE OF INVENTION: ORIGIN OF REPLICATION COMPLEX GENES
NUMBER OF SEQUENCES: 24
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                                                                                                                                                                                           FILING DATE:
CLASSIFICATION: 435
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STRANDEDNESS: single
TOPOLOGY: linear
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San Francisco
California
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KOBAYASHI, Ryuji
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          amino acids
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83.3%;
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Best Local Similarity
Watches 5; Conserv
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; TOPOLOGY: lin
; MOLECULE TYPE:
US-08-484-106-8
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US-07-878-960-2
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Patent No.
                                   Matches
                                                            Query Match
                                                                                                                                                                                                                               TELEFAX: 206/727-3601
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 683 amino acid
                                                                                                                                   FRAGMENT TYPE: internal ORIGINAL SOURCE: ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                         OPERATING SYSTEM: PC-DC
SOFTWARE: PatentIn Rela
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                               MOLECULE TYPE: protein HYPOTHETICAL: YES
                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: ON TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/833,835
FILING DATE: 05-FEB-1992
NAME: 530
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CORRESPONDENCE ADDRESS:
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                                                                                                  CELL TYPE:
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                                  Local Similarity
les 5; Conserv
1 NEALEK 6
                                                                                                                           TISSUE TYPE:
                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                                    TYPE: amino acid
                                                                                                                                                                                                                                                                                      TELEPHONE:
                                                                                                                                                                                                                                                                                                                      NAME: Sorrentino, Joseph M. REGISTRATION NUMBER: 32,598
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5, 5444164
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                                   Conservative
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SYSTEM: PC-DOS/MS-DOS
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A549
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                                                Score 25;
Pred. No.
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                                                6.7e+02;
                                                            DB 1;
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Search completed: November 13, 2002, 13:18:04 Job time : 9.68085 secs

Copyright

GenCore version 5.1.3 (c) 1993 - 2002 Compus

Compugen Ltd

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Total number of hits satisfying chosen parameters:
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Sequence:
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seq length: 2000000000
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2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep::
                                                         ptodata/2/pubpaa/US08_FUBCOMB.pep:*
ptodata/2/pubpaa/US09_NEW_PUB.pep:*
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94 147 147 147 147 186 886 505 505 505 505 683 683 683 799	Length
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US-09-864-761-38288 US-09-815-242-12398 US-09-815-242-12398 US-09-815-242-12154 US-09-815-242-13100 US-09-864-761-366-110 US-09-864-761-366-11 US-09-815-242-131323 US-09-815-242-1323 US-09-815-242-1313	ID
Sequence 38288, A Sequence 5637, Ap Sequence 12968, A Sequence 13154, A Sequence 180, App Sequence 3641, A Sequence 5817, App Sequence 20, Appl Sequence 218, App Sequence 11023, App Sequence 12, Appl Sequence 122, App Sequence 123, App Sequence 123, App Sequence 124, Appl Sequence 125, Appl Sequence 126, Appl Sequence 127, Appl Sequence 128, Appl Sequence 1313, Ap Sequence 1313, Ap	Description

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Sequence 27	Sequence 88	9	Sequence 2,	Sequence 13	Sequence 4,	Sequence 9,		Ø	-		Sequence 11	Sequence 2,	Sequence 4,	Sequence 2,	æ	Sequence 10	Seguence 68		Sequence 43	Sequence 60	Sequence 12	Sequence 10		Sequence 12
'n	3, Appl	1591, A	, Appli	1413, A	Appli	Appli	3, Appli	?, Appl), App	11352, A	11523, A	Appli	Appli	App11	1933, A)050, A	680, App	.656, A	3091, A	•	, Appl	-	•	υ

ALIGNMENTS

US-09-864-761-38288; A

APPLICANT: Penn, Sharron G.

INFORMATION:

8288, Application US/09864761 US20020048763A1

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PRIOR APPLICATION NUMBER: US 60/180,312 PRIOR FILING DATE: 2000-02-04
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
  FILING DATE: 2001-01-30
FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00662
BTT.TNG DATE: 2001-01-3
                                                              APPLICATION NUMBER: PCT/US01/00663 FILING DATE: 2001-01-30
                                                                                                                                                          APPLICATION NUMBER: PCT/US01/00665
FILING DATE: 2001-01-30
                                                                                                                                                                                                     FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00664
FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00669
FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 60/236,359 FILING DATE: 2000-09-27
                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: GB 24263.6 FILING DATE: 2000-10-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 2000-08-03
                                                                                                            APPLICATION NUMBER: PCT/US01/00668 FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: PCT/US01/00666
FILING DATE: 2001-01-30
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Chen, Wensheng
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NUMBER:
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                                                           ; ORGANISM: Staphylococcus aureus US-09-815-242-5637
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Best Local S
Matches 5
                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/269,308
                                                                                                               SOFTWARE: FastSEQ
SEQ ID NO 5637
LENGTH: 144
Query Match
Best Local Similarity
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Bequence 5637, A
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TITLE OF INVENTION: Identification of Essential Genes
TITLE OF INVENTION: Prokaryotes
FILE REFERENCE: ELITRA.011A
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                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
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CURRENT FILING DATE: 2001-03-21
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OTHER INFORMATION: EXPRESSED IN BT4
OTHER INFORMATION: EXPRESSED IN HEA
OTHER INFORMATION: EST_HUMAN HIT: A
OTHER INFORMATION: SWISSPROT HIT: P
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TYPE: PRT
ORGANISM: Homo sapiens
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Yamamoto, Robert T.
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Trawick, John D.
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Zyskind, Judith W.
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                                                                                                                                                        Windows Version
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Pred. No.
   Score 27;
Pred. No.
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EART, SIGNAL = 1.2
AW963611.1, EVALUE 5.00e-07
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; TYPE: PRT ; ORGANISM: Staphylococcus aureus US-09-815-242-12398
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Best Local Similarity
""+" 5; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 12398
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PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
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TITLE OF INVENTION: Prokaryotes
FILE REFERENCE: ELITRA.011A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE:
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                                                                                                                                      PPLICANT: Haselbeck, Robert PPLICANT; Ohlsen, Karl L. PPLICANT: Zyskind, Judith W.
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cent No. US20020061569A1
                                                                PPLICANT:
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           ILICANT: Xu, H. Howard
LE OF INVENTION: Identification of Essential
LE OF INVENTION: Prokaryotes
REFERENCE: ELITRA.011A
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                                                                                                                                                                                      INFORMATION:
APPLICATION NUMBER: US/09/815,242
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Yamamoto, Robert T.
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Zyskind, Judith W.
                                                                                      Trawick, John D. Carr, Grant J.
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                                                 ; ORGANISM: Staphylococcus aureus US-09-815-242-13154
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US-09-815-242-12968
                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/815,242
CURRENT FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR APPLICATION NUMBER: 60/253,625
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PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
  Query Match
                                                                                                                                                      SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Identification of Essential Genes in TITLE OF INVENTION: Prokaryotes
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) ID NO 12968
JENGTH: 147
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                                                                                                                                                                          WARE: FastSEQ for Windows Version
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les 5; Conserv
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                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/257,931 FILING DATE: 2000-12-22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wall, Daniel
Trawick, John D.
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Zyskind, Judith W.
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     93.1%;
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Score 27;
  DB 10;
  Length 147;
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Query Match
Best Local Similarity
Wetches 5; Conserve
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                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                       Sequence 36641, Application Patent No. US20020048763A1
                                                                                                    TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY FILE REFERENCE: AGOMICS-X-1 CURRENT APPLICATION NUMBER: US/09/864,761 CURRENT FILING DATE: 2001-05-23 CURRENT FILING DATE: 2001-05-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Sherman, Amir
APPLICANT: Silva, Jeff
APPLICANT: Summers, Eric
TITLE OF INVENTION: Methods for Improving Secondary Metabolite Production in Fungi
FILE REFERENCE: 109272.147
CURRENT APPLICATION NUMBER: US/09/801,368
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: US 09/487,558
PRIOR APPLICATION NUMBER: US 60/160,587
                                PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILLING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
                                                                                                                                                                                            APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
                                                                                                                                                                                                                                                                                                                             09-864-761-36641
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PRIOR APPLICATION NUMBER: US 09/632,366 PRIOR FILING DATE: 2000-08-03
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APPLICANT
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Milne, Todd
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Salama, Sofie
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83.3%;
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US 60/236,359 9-27 PCT/US01/00666

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PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00670
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR FILING DATE: 2000-09-21
PRIOR APPLICATION NUMBER: US 09/608,408
PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
                                                                                                                                                                                                              Sequence 11302, Application US/09815242 Patent No. US20020061569A1 GENERAL INFORMATION:
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OTHER INFORMATION: EXPRESSED IN HEARIN,
OTHER INFORMATION: EXPRESSED IN HELA,
OTHER INFORMATION: EXPRESSED IN HELA,
OTHER INFORMATION: EXPRESSED IN HELA,
OTHER INFORMATION: EXPRESSED IN HEACEN
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OTHER INFORMATION: EXPRESSED IN FETAL
OTHER INFORMATION: EXPRESSED IN BT474,
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SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 36641
LENGTH: 18
                                             APPLICANT:
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                                                                                               APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
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                           PPLICANT:
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OR FILING DATE: 2001-01-30
OR APPLICATION NUMBER: PCT/USO1/00668
OR FILING DATE: 2001-01-30
OR APPLICATION NUMBER: PCT/USO1/00663
OR FILING DATE: 2001-01-30
OR FILING DATE: 2001-01-30
OR FILING DATE: 2001-01-30
OR FILING DATE: 2001-01-30
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les 5; Conserv
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FILING DATE: 2001-01-30
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INVENTION: Identification of Essential Genes in
                                                                                                                                        Ohlsen, Kari L.
Zyskind, Judith W.
                                                                                                                   Wall, Daniel
                                                                    Carr, Grant J.
                                                                                          Trawick, John D.
                      (amamoto, Robert T.
(u, H. Howard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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EXPRESSED
EST_HUMAN
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ED IN HELAT, SIGNAL = 1.5
ED IN HELA, SIGNAL = 1.4
ED IN HELAOO, SIGNAL = 1.4
ED IN PLACENTA, SIGNAL = 1.8
ED IN ADULT LIVER, SIGNAL = 2.6
ED IN FETAL LIVER, SIGNAL = 2.6
ED IN FETAL SIGNAL = 1.3
ED IN BOAT ASSIGNAL = 1.3
ED IN GOR MARROW, SIGNAL = 1.8
ED IN BONE MARROW, SIGNAL = 1.8
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TITLE OF INVENTION: IDentification of Essential Genes in TITLE OF INVENTION: Prokaryotes FILE REFERENCE: ELITAA.011A (1978) FILE REFERENCE: 2001-03-21 (1978) FILE REFERENCE: 2000-03-21 (1978) FILE REFERENCE: 2000-05-23 (1978) FILE REFERENCE: 2000-05-26 (1978) FILE REFERENCE: 2000-05-26 (1978) FILE REFERENCE: 2000-10-23 (1978) FILE REFERENCE: 2000-10-23 (1978) FILE REFERENCE: 2000-11-27 (1978) FILE REFERENCE
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Best Local Similarity
Watches 5; Conserve
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US-09-815-242-5817
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US-09-815-242-11302
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PRIOR FILING DATE: 2000-03-21
PRIOR PELICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
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SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 11302
                                                                                                                                           NUMBER OF SEQ ID NOS: 14110
SOFTWARE: FastSEQ for Windov
SEQ ID NO 5817
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Patent No. US20020061569A1
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APPLICANT:
APPLICANT:
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PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/269,308
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APPLICANT: Ohlsen, Kari L.
APPLICANT: Zyskind, Judith W.
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PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
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LENGTH: 423
TYPE: PRT
ORGANISM: Staphylococcus aureus
FEATURE: \
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FILING DATE: 2000-11-27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Xu, H. Howard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Trawick, John D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Yamamoto, Robert T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Carr, Grant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wall, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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Pred. No.
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US-09-765-272-218
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; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte Clone 3039890
US-09-938-803-20
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US-09-938-803-20
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NUMBER OF SEQ ID NOS: 40
SOFTWARE: PERL Program
SEQ ID NO 20
LENGTH: 505
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Best Local S
Matches 5
                                                                                                                                                    Sequence 218, Application US/09765272
Patent No. US20020061545A1
GENERAL INFORMATION:
APPLICANT: Choi et. al.
TITLE OF INVENTION: Streptococcus pneumoniae Antigens and Vaccines
NUMBER OF SEQUENCES: 452
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS: Human Genome Sciences, Inc.
STREET: 9410 Key West Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Yang, Junming
APPLICANT: AZIMZAI, Yalda
TITLE OF INVENTION: FULL-LENGTH EXPRESSED GENETIC MARKERS
FILE REFERENCE: PP-0695 US
CURRENT APPLICATION NUMBER: US/09/938,803
CURRENT FILING DATE: 2000-08-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT FILING DATE: 2000-08-24
PRIOR APPLICATION NUMBER: 09/311,894
PRIOR FILING DATE: 1999-05-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: VARIANT
LOCATION: (1)...(423)
OTHER INFORMATION: Xa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity has 5; Conserv
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les 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                      1 NEALEK 6
                         COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.4Mb storage
COMPUTER: HP Vectra 486/33
OPERATING SYSTEM: MSDOS version 6.2
CURRENT
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                                                                                                            COUNTRY: USA
                                                                                                                         CITY: Rockville
STATE: Maryland
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Lal, Preeti
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Baughn, Mariah R.
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                                                                                              20850
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83.3%;
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83.3%;
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Pred. No.
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Pred.
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; SEQUENCE DESCRIPTION: SEQ ID NO: 218: US-09-765-272-218
                                                                                   ; ORGANISM: Staphylococcus aureus US-09-815-242-13023
                                                                                                                                                                              SOFTWARE: Fastar SOFTWARE: Fastar SOFTWARE: Fastar SOFTWARE: Fastar SOFTWARE SOFTWAR
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US-09-815-242-13023
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/191,078 PRIOR FILING DATE: 2000-03-21
                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/207,727 PRIOR FILING DATE: 2000-05-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/206,848 PRIOR FILING DATE: 2000-05-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: Identification of Essential Genes in TITLE OF INVENTION: Prokaryotes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Haselbeck, Robert
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             357 NEAVEK 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
tes 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/269,308
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LENGTH: 565 amino acids
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PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/09/815,242 FILING DATE: 2001-03-21
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Zyskind, Judith W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: (301) 3(
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       89.7%;
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Pred. No. 1.3e+02
       Score 26;
       DB 10;
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Length 578;
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SOFTWARE: Annomax Sequ
SEQ ID NO 3847.9
LENGTH: 123
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Sequence 38479, Application US/09864761
Patent No. US20020048763A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
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                                                        OTHER INFORMATION: NOTHER INFORMATION: EOTHER INFORMATION: E
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CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: PCT/US01/00667 PRIOR FILING DATE: 2001-01-30
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PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR FILING DATE: 2000-10-04
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PRIOR FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 60/236,359 PRIOR FILING DATE: 2000-09-27
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                                                                                                                                                                                                           ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ILE REFERENCE: Aeomica-X-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR THE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
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                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 09/608,408 FILING DATE: 2000-06-30
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                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US (FILING DATE: 2001-01-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: PCT/US01/00670 FILING DATE: 2001-01-30 APPLICATION NUMBER: US 60/234,687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: PCT/US01/00661 FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: PCT/US01/00663
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N: MAP TO ACOO6385.3

N: EXPRESSED IN PLACENTA, SIGNAL = 5.5

N: EXPRESSED IN BRAIN, SIGNAL = 5.9

N: EXPRESSED IN ADULT LIVER, SIGNAL = 5.7

N: EXPRESSED IN LONG, SIGNAL = 5.7

N: EXPRESSED IN HEART, SIGNAL = 5.4

N: EXPRESSED IN FETAL LIVER, SIGNAL = 5.2
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1; Mismatches 0;
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Query Match
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Query Match
Best Local Similarity
""+"hes 5; Conserve
                                                                         ; TYPE: PRT ; ORGANISM: Arabidopsis thaliana US-09-934-066-2
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US-09-934-066-2
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US-09-742-954-12
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APPLICANT: Morgante, Michele
APPLICANT: Rafalski, J. Antoni
APPLICANT: Hitz, William D.
APPLICANT: Kinney, Anthony J.
TITLE OF INVENTION: Aromatic AV
FILE REFERENCE: BB-1197
                                                                                                                                     SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                      Sequence 2, Application US/09934066 Patent No. US20020108149A1
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LENGTH: 429
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                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/934,066
CURRENT FILING DATE: 2001-08-21
PRIOR APPLICATION NUMBER: US 60/226,804
PRIOR FILING DATE: 2000-08-21
                                                                                                                                                                                                                                            APPLICANT: Gruis, Darren B.
APPLICANT: Jung, Rudolf
TITLE OF INVENTION: Methods of Increasing Polypeptide
TITLE OF INVENTION: Accumulation in Plants
FILE REFERENCE: 35718/237251
                                                                                                                                                                   NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: JUNDBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/742,954
CURRENT ETLING DATE: 2000-12-21
PRIOR APPLICATION NUMBER: 60/094,783
PRIOR FILING DATE: JULY 31, 1998
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Rafalski, J. Antoni
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BB-1197
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83.3%;
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83.3%; Pred. No. 1.8e+02;
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Search completed: November 13, 2002, 13:40:17 Job time: 4.22796 secs 1 NEALEK 6 || ||| 184 NEVLEK 189

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Title:
Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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32.134 Million cell updates/sec
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(cgn2_6/ptodata/1)paa/US086_COMB.pep:

(cgn2_6/ptodata/1)paa/US088_COMB.pep:

(cgn2_6/ptodata/1)paa/US089_COMB.pep:

(cgn2_6/ptodata/1)paa/US099_COMB.pep:

(cgn2_6/ptodata/1)paa/US009_COMB.pep:

(cgn2_6/ptodata/1)paa/US009_COMB.pep:

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US-09-914-259-5

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US-09-252-691C-9015

US-10-234-432-84

US-09-791-537-130121

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  Sequence 5, Appli
Sequence 9015, Ap
Sequence 9015, Ap
Sequence 84, Appl
Sequence 130121,
Sequence 130123,
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Sequence 13578, sequence 135790, sequence 135791, sequence 135791, sequence 135794, sequence 135794, sequence 135796, sequence 135796, sequence 135798, sequence 135799, sequence 135799, sequence 15179, A sequence 15179, A sequence 5296, App sequence 5296, App sequence 63072, A sequence 55574, A sequence 55574, A sequence 55574, A	aquence 12999 equence 12999 equence 13001 equence 13578

ALIGNMENTS

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Sequence 5, Application US/09914259
GENERAL INFORMATION:
APPLICANT: MAKOWSKI, Lee
APPLICANT: Hyman, Paul
APPLICANT: Williams, Mark
TITLE OF INVENTION: STAGED ASSEMBLY OF NANOSTRUCTURES
FILE REFERENCE: 8471-010-999
CURRENT APPLICATION NUMBER: US/09/914,259
CURRENT FILING DATE: 2000-11-21
NUMBER OF SEQ ID NOS: 180
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 5
LENGTH: 35
TYPE: PAT
ORGANISM: Homo sapiens
US-09-914-259-5
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/ ORGANISM: Enterobacter cloacae
US-09-252-691-9015
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CURRENT FILING DATE: 1999-02-18
NUMBER OF SEQ ID NOS: 11324
SEQ ID NO 9015
LENGTH: 92
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                                                                 APPLICANT: Persing, David H.
APPLICANT: MCNeill, Patricia D.
APPLICANT: MCNeill, Patricia D.
APPLICANT: MCNeill, Patricia D.
APPLICANT: COMPOUNDS AND METHODS
TITLE OF INVENTION: TREATMENT OF BABESIA
FILE REFERENCE: 210121.560
CURRENT APPLICATION NUMBER: US/10/234,432
CURRENT FILING DATE: 2002-08-30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 60/074,787
PRIOR FILING DATE: 1998-02-18
NUMBER OF SEQ ID NOS: 11326
SEQ ID NO 9915
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EQ ID NO 84
LENGTH: 93
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APPLICANT: Lodes, Michael J.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Enterobacter cloacae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PPLICANT: Keith G. Weinstock et al.
ITLE OF INVENTION: NUCLEIC ACID AMINO ACID SEQUENCES RELATING TO ENTEROBACTER
ITLE OF INVENTION: CLOACAE FOR DIAGNOSTICS AND THERAPEUTICS
ILLE REFERENCE: 107196.135
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Pred. No.
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; TYPE: PRT; ORGANISM: Babesia sp. WA1
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Best Local 9
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CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: PatentIn version 3.0
SEQ ID NO 130123
LENGTH: 130
TYPE: PRT
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SEQ ID NO 130121
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GENERAL INFORMATION
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Best Local
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Best Local Similarity
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APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THEE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY 1
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
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CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
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TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY N
TITLE OF INVENTION: METHODS OF USE THEREOF
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ilarity 100.0%;
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Pred. No. 2.5e+02;
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Pred. No. 2.6e+02;
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RESULT 7 US-09-791-537-129991

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APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
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APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBI
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
                                                                                                                        ENERAL INFORMATION:
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LE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBI
LE OF INVENTION: METHODS OF USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                          ID NO 1
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                                                                                                                                     Application US/09791537
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; ORGANISM: Human immunodeficiency virus type US-09-791-537-129993
RESULT 12
US-09-791-537-135781
· Sequence 135781, Application US/09791537
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GENERAL INFORMATION
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SEQ ID NO 130014
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CURRENT FILING DATE: 2001-02-22
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TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME
TITLE OF INVENTION: METHODS OF USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                      PPLICANT: DANZET, JOSEPH
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME
TITLE OF INVENTION: METHODS OF USE THEREOF
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Pred. No. 2.6e+02;
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GENERAL INFORMATION
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CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 133055
NUMBER OF SEQ ID NOS: 133055
SOFTWARE: Patentin version 3.0
                                                     SOFTWARE: Patentin
SEQ ID NO 135783
                                                                                                                 APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THERE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Human immunodeficiency virus type 1 -09-791-537-135782
                                                                                     FILE REFERENCE: 261/210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
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                                                                                                                                                                                                                                             APPLICANT: Bionomix, Inc.
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Q ID NO 135782
LENGTH: 133
TYPE: PRT
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ORGANISM: Human immunodeficiency virus type 1
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LE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
LE OF INVENTION: METHODS OF USE THEREOF
E REFERENCE: 261/210
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Pred. No. 2.7e+02;
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Search completed: November 13, 2002, 13:39:13 Job time: 121.383 secs
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Best Local :
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CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
                                                                                                                                                                                                                                                                                ILE REFERENCE:
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ITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY PROPERTY OF INVENTION: METHODS OF USE THEREOF
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75 NEALEK 80
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Listing first 45 summaries
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                                                            US-09-856-086-1
US-09-513-999C-6211
US-09-513-999C-6681
US-10-092-411A-3774
US-10-092-411A-2892
US-10-092-411A-2892
US-10-092-411A-5142
US-10-092-411A-5142
US-10-092-411A-5142
US-10-092-411A-4784
PCT-US02-21461-3
US-10-092-411A-4663
US-10-092-411A-4663
US-10-092-411A-4663
US-10-092-411A-3927
US-10-092-411A-3927
US-10-092-411A-3923
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Sequence 1, Appli
Sequence 5011, Ap
Sequence 5017, Ap
Sequence 5017, Ap
Sequence 4681, Ap
Sequence 4571, Ap
Sequence 2465, Ap
Sequence 5142, Ap
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Sequence 4784, Ap
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Sequence 4784, Appli
Sequence 483, Appli
Sequence 463, Ap
Sequence 463, Ap
Sequence 4784, Appli
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Sequence 3, Appli
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Sequence 9, Appli
Sequence 4, Appli
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US-09-513-999C-6211
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Best Local Similarity 100.0%;
Matches 6; Conservative 0,
                                                            TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
                      NAME/KEY: UNSURE LOCATION: 90
    LOCATION: 90
OTHER INFORMATION: Xaa-Leu or Val
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40,	Sequence 40, Appl	Sequence 40, Appl	•	•	•	•	•	Sequence 40, Appl	Sequence 3574, Ap	Sequence 4438, Ap	۲	Sequence 252, App	Sequence 141, App	Sequence 17, Appl	Sequence 5144, Ap	Sequence 2995, Ap	Sequence 2423, Ap	Sequence 4, Appli

ALIGNMENTS

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CURRENT APPLICATION NUMBER: US/09/856,086
; CURRENT FILING DATE: 2001-07-30
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; SEQ ID NO 1
; LENGTH: 6
; TYPE: PRT
; ORGANISM: Homo sapiens, Bos
US-09-856-086-1
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR FILING DATE: 1999-02-26
NUMBER OF SEO ID NOS: 36681
SOCTWARE: PATENT.pm
SEQ ID NO 6211
LENGTH: 103
                                                                                                                                                                              Sequence 6211, Application US/09513999C
GENERAL INFORMATION:
APPLICANT: Dunas Milne Edwards, J.B.
APPLICANT: Duclert, A.
APPLICANT: Giordano, J.Y.
APPLICANT: Giordano, J.Y.
APPLICANT: GIVENTION: Expressed Sequence Tags
FILE REFERENCE: 59.US2.REG
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GENERAL INFORMATION:
APPLICANT: EBRINGER, ALAN
TITLE OF INVENTION: DIAGNOSIS OF DEMYELINATING
FILE REFERENCE: 78104.040
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Pred. No.
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US-09-513-999C-5017
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CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR FILING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 5017
LENGTH: 118
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SEQ ID NO 6681
LENGTH: 105
TYPE: PRT
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PRIOR FILING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
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APPLICANT: Glordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins
FILE REFERENCE: 59.US2.REG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/513,999C CURRENT FILING DATE: 2000-02-24
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TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins
FILE REFERENCE: 59.US2.REG
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9-513-999C-6681
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Local Similarity 83.3%;
Local Similarity 89.7%;
Local Similarity 
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Pred. No.
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Pred. No.
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SEQ ID NO 4571
LENGTH: 399
TYPE: PRT
APPLICANT: OHTANI, NOTIKO APPLICANT: MATSUI, Keiko APPLICANT: YOSHIDA, Nei APPLICANT: SUGITA, Yuji APPLICANT: IZUHARA, Kenji TITLE OF INVENTION: METHOD OF FILE REFERENCE: SHZ-009US
                                                                                                                                  Sequence 33, Application US/10204752A GENERAL INFORMATION:
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APPLICANT: Lynn Doucette-Stamm et al
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Best Local s
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CURRENT PEPILCATION NUMBER: US/10/092,411A
CURRENT FILING DATE: 2002-03-07
ERIOR APPLICATION NUMBER: US 09/134,001
PRIOR PILING DATE: 1998-08-13
PRIOR PILING DATE: 1998-11-08
PRIOR FILING DATE: 1998-11-08
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PRIOR APPLICATION NUMBER: US 09/134,001
PRIOR FILING DATE: 1998-08-13
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EQ ID NO 3754
LENGTH: 252
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PRIOR FILING DATE: 1997-11-08
PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR FILING DATE: 1997-08-14
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US-10-092-411A-2892
US-10-092-411A-2892, Application US/10092411A
; Sequence 2892, Application US/10092411A
; GENERAL INFORMATION:
APPLICANT: Lynn Doucette-Stamm et al
APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR FILING DATE: 1997-11-08
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COATION: 106
OTHER INFORMATION: Xaa- *
US-09-513-999C-5465
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US-09-513-999C-5465
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PRIOR FILING DATE: 2000-12-26
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 33
LENGTH: 836
TYPE: PRT
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SEQ ID NO 5465
LENGTH: 119
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GENERAL INFORMATION:
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                PRIOR APPLICATION NUMBER: US 60/055,779 PRIOR FILING DATE: 1997-08-14
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PRIOR FILING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
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CURRENT FILING DATE: 2000-02-24
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APPLICANT: Lynn Doucette-Stamm et al TITLE OF INVENTION: NUCLEIC ACID AND ACID SEQUENCES RELATING TO : TITLE OF INVENTION: NUCLEIC ACID AND ACID SEQUENCES RELATING TO: TITLE OF INVENTION: BEIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS FILE REFERENCE: 032796-101

CURRENT APPLICATION NUMBER: US/10/092,411A

CURRENT FILING DATE: 2002-03-07

PRIOR APPLICATION NUMBER: US 09/134,001

PRIOR APPLICATION NUMBER: US 09/134,001

PRIOR FILING DATE: 1998-08-13

PRIOR APPLICATION NUMBER: US 00/064,964

PRIOR FILING DATE: 1997-11-08

PRIOR APPLICATION NUMBER: US 60/055,779

PRIOR OF SEQ ID NOS: 5676

SEQ ID NO 5142

LENGTH: 235
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CURRENT FILING DATE: 2002-03-07
PRIOR APPLICATION NUMBER: US 09/134,001
PRIOR FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR FILING DATE: 1997-11-08
PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR FILING DATE: 1997-08-14
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GENERAL INFORMATION:
APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING
TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 032796-101
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SEQ ID NO 5665
LENGTH: 181
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Best Local Similarity
Matches 4; Conserv
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                                                                                                                                  TYPE: PRT
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                        Score 24; DB Pred. No. 71;
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Pred. No. 55;
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Pred. No.
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NEALEK 6

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Sequence 4784, Application US/10092411A
GENERAL INFORMATION:
APPLICANT: Lynn Doucette-Stamm et al
APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION: NUCLEIC ACID AMD AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
TITLE OF INVENTION: EPIDERHIDIS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 032796-101
CURRENT APPLICATION NUMBER: US/10/092,411A
CURRENT FILING DATE: 1907-03-07
PRIOR FILING DATE: 1909-08-13
PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR APPLICATION NUMBER: US 60/065,779
PRIOR FILING DATE: 1997-08-14
NUMBER OF SEQ ID NOS: 5676
SEQ ID NO 4784
LENGTH: 244
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GENERAL INFORMATION:

APPLICANT: Elixir Pharmaceuticals, Inc. et al.

TITLE OF INVENTION: SIR2 ACTIVITY

FILE REFERENCE: 13407-015801

CURRENT APPLICATION NUMBER: PCT/US02/21461

CURRENT FILING DATE: 2002-07-08

PRIOR APPLICATION NUMBER: US 10/190,159

PRIOR FILING DATE: 2002-07-05

PRIOR APPLICATION NUMBER: US 60/303,370

PRIOR APPLICATION NUMBER: US 60/303,456

PRIOR FILING DATE: 2001-07-06

PRIOR FILING DATE: 5001-07-06

PRIOR FILING DATE: 5001-07-06
RESULT 14
US-10-274-874-4
; Sequence 4, Application US/10274874
; GENERAL INFORMATION:
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TYPE: PRT
GRGANISM: Homo sapiens
PCT-US02-21461-3
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Best Local Similarity 100.

Matches 5; Conservative
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Search completed: November 13, 2002, 13:39:38
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                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR FILING DATE: 1997-08-14
NUMBER OF SEQ ID NOS: 5676
SEQ ID NO 3927
LENGTH: 410
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 3927, Application US/10092411A
GENERAL INFORMATION:
APPLICANT: LYNN DOUGETTE-Stamm et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCO:
TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 032796-101
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LENGTH: 39
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US/09/277,196
PRIOR FILLMG DATE: 1999-03-26
PRIOR APPLICATION NUMBER: 60/079736
PRIOR FILLMG DATE: 1998-03-27
NUMBER OF SEQ ID NOS: 20
SOFTMARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Ratovitski, Edward
APPLICANT: Sidaransky, David
TITLE OF INVENTION: P40 Protein Acts as an Oncogene
FILE REFERENCE: 01107.79765
CURRENT APPLICATION NUMBER: US/10/274,874
CURRENT FILING DATE: 2002-10-22
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Pred. No. 1.2e+02;
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Result

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Database

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hypothetical prote	AE3163	ผ	180	89.7	26	51
RS43 protein - rat	S70484	N	142	89.7	26	•
hemoglobin alpha-D	HAGSDC	_	141	89.7	26	ω
superoxide dismuta	S52362	ν	137	89.7	26	2
superoxide dismuta	S52360	N	137	89.7	26	_
conserved hypothet	G70317	N	109	89.7	26	0
hypothetical prote	F90490	N	86	89.7	26	w
probable coiled-co	F81308	N	57	89.7	26	ω
regulatory protein	RGBYL3	_	886		27	7
conserved hypothet	H90543	N	787	93.1	27	51
F21H2.11 protein -	B86470	N	708	93.1	27	G
TBP-interacting pr	D69476	N	449	93.1	27	**
hypothetical prote	T48280 .	N	407	93.1	27	ω
phosphopyruvate hy	S24996	N	372	93.1	27	۸
conserved hypothet	F89936	N	366	93.1	27	_
gluconate 5-dehydr	AI0309	N	254	93.1	27	0

ALIGNMENTS

A; Molecule type: protein
A; Residues: 1-162 <GODD>
C; Superfamily: lipocalin; li
C; Keywords: dimer; milk
F; 10-160/Domain: lipocalin h
F; 66-160, 106-119/Disulfide b A;Molecule type: DNA
A;Residues: 1-37,'Y',39-180 <ALIA>
A;Residues: 1-37,'Y',39-180 <ALIA>
A;Cross-references: GB:M32232
A;Experimental source: beta-lactoglobulin A
R;All, S.; Clark, A.J.
J. Mol. Biol. 199, 415-426, 1988
A;Title: Characterization of the gene encoding ovine beta-lactoglobulin.
A;Reference number: A92942; MUID:88172489; PMID:3351935 C; Species: Ovis orientalis musimon, Ovi C; Date: 30-Jun-1989 #sequence_revision C; Accession: S00132 R; Godovac-ribeta-lactoglobulin precursor - sheep
NAIternate names: beta-lactoglobulin A; beta-lactoglobulin B; beta-lactoglobulin C; Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)
C; Date: 17-May-1985 #sequence_revision 19-Apr-1996 #text_change 22-Jun-1999
C; Accession: JQ0749; JQ0748; A30011; B30011; S02136; A25136; A03221; S04955
R; Ali, S.; McClenaghan, M.; Simons, J.P.; Clark, A.J.
Gene 91, 201-207, 1990
A; Title: Characterisation of the alleles encoding ovine beta-lactoglobulins
A; Reference number: JQ0748; MUID:91007276; PMID:1976573
A; Accession: JQ0748; MUID:91007276; PMID:1976573 R;Godovac-Zimmermann, J.; Conti, A.; Napolitano, L.
Biol. Chem. Hoppe-Seyler 368, 1313-1319, 1987
A;Title: The complete amino-acid sequence of dimeric beta-lactoglobulin from mouflon A;Reference number: S00132; MUID:88106996; PMID:3426802
A;Accession: S00132 A; Molecule type: DNA A; Residues: 1-180 <ALIB> A; Cross-references: GB: M32232 A; Experimental source: beta-lactoglobulin A; Accession: JQ0748 Similarity 6; Conserv Conservative 100.0%; lipocalin homology bonds: homology <LIP> 0, #status predicted Score 29; DB Pred. No. 33; Ovis ammon musimon (mouflon) ion 30-Jun-1989 #text_change Mismatches DB 2; .. Length 162; Indels beta-lactoglobulins A beta-lactoglobulin 12-May-1995 0 Gaps Similarity 0 and B

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Nature
                                                                       translation initiation factor IF-3 [imported] - xersinia pesus (surum co. C;Species: Yersinia pesuis C;Date: 02-Nov-2001 #sequence_revision 02-Nov-2001 #text_change 09-Nov-2001 C;Accession: AIO296
R;Parkhill, J; Wren, B.W.; Thomson, N.R.; Titball, R.W.; Holden, M.T.G.; P.R;Parkhill, J; Wren, B.W.; Thomson, N.R.; Titball, R.W.; Holden, M.T.G.; P.R;Parkhill, J; Wren, B.W.; Thomson, N.R.; Davies, R.M.; Davis, P.;
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                                            deno-Tarraga, A.M.; Chillingworth, T.
11, M.; Rutherford, K.; Simmonds, M.;
                                                                                                                                                                                                                                                      AI0296
                                                                                                                                                                                                                                                                                    RESULT
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A; Residues: 19-37,'Y',39-180 <PRE>
A; Residues: 19-37,'Y',39-180 <PRE>
R; Erhardt, G.; Godovac-21mmermann, J.; Conti, A.
Biol. Chem. Hoppe-Seyler 370, 757-762, 1989
A; Title: Isolation and complete primary sequence of a new A; Reference number: S04955; MUID:89374823; PMID:2775495
A; Accession: S04955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R;Prebux, G.; Braunitzer, G.; Kolde, H.J.
Arch. Int. Physiol. Blochim. 88, B45-B46, 1980
A;Title: Primary structure of ovine beta-lactoglobulin.
A;Reference number: A03221; MUID:80219294; PMID:6155855
A;Accession: A03221
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Nucleic Acids Res. 16, 10379-10380, 1988

A;Title: Complete nucleotide sequence of the genomic ovine beta-lactoglobulin A;Reference number: S02136; MUID:89057492; PMID:3194215

A;Accession: S02136
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R;Gaye, P.; Hue-Delahale, D.; Mercler, J.C.; Soulier, S.; Vilotte, J.L.;
Biochimie 68, 1097-1107, 1986
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A;Experimental source: beta-lactoglobulin
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A; Molecule type: DNA
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A; Residues: 19-37, 'Y', '39-165, 'Q', '167-180 <ERH>
A; Residues: 19-37, 'Y', '39-165, 'Q', '167-180 <ERH>
A; Experimental source: beta-lactoglobulin C
C; Comment: This protein is the major milk whey protein of ruminants
C; Comment: Under physiological conditions beta-lactoglobulin exists
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A;Experimental source: beta-lactoglobulin II
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A;Residues: 1-180 <H
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Title: Ovine beta-lactoglobulin messenger RNA: nucleotide
A;Reference number: A25136; MUID:87049827; PMID:3096387
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1-37,'Y',39-102,'N',104-180 <ALI2>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                      Wren, B.W.; Thomson, N.R.; Titball, R.W.; Holden, M.T.G.; .M.; Chillingworth, T.; Cronin, A.; Davies, R.M.; Davis, P. ord, K.; Simmonds, M.; Skelton, J.; Stevens, K.; Whitehead,
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                                      M.T.G.; Prentice, M.B
Davis, P.; Dougan, G.;
hitehead, S.; Barrell,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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                                                                 A; Gene: higI
C; Superfamil
C; Keywords:
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                                                                                                                                                             A; Experimental source: C; Genetics:
                                                                                                                                                                                                                                           A; Molecule type: DNA
A; Residues: 1-207 < PAR>
                                                                                                                                                                                                                                                                                                                           A; Reference number: A81250; A; Accession: B81256
                                                                                                                                                                                                                                                                                                                                                   A; Title: The genome sequence of the food-borne pathogen Campylobacter jejuni reveal: A; Reference number: A81250; MUID:20150912; PMID:10688204
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                                                                                                                                                                                  A;Cross-references: GB:AL139079; GB:AL111168; NID:g6968971;
A;Experimental source: serotype O2, strain NCTC 11168
                                                                                                                                                                                                                                                                                                   A; Status: preliminary
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Nature 403, 665-668, 2000
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Superfamily:

hydrolase

hisI bifunctional enzyme;

hisI bifunctional

enzyme

homology; hisi

PIDN:CAB73592.1;

PID:g6

l, K.; Ketley, Rutherford, K

y, J.M.; Churcher, K.M.; VanVliet, A

Α.,

Whitehead,

, s.;

C.; Basham,

hisI; Cj1604

Match

100.08;

Score

29;

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A;Genome: cyanelle
C;Superfamily: H+-transporting ATP synthase chain
C;Keywords: ATP biosynthesis; cyanelle; hydrolase;
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                                                                                                                                                                               A; Cross-references:
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A; Residues: 1-185 <STI>
                                                                                                                                                                                                                                       A; Reference number: Z15840
A; Accession: T06912
                                                                                                                                                                                                                                                                                                          C;Species: cyanelle Cyanophora paradoxa
C;Date: 30-Apr-1999 #sequence_revision 30-Apr-1999
C;Accession: T06912
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C;Superfamily: translation initiation factor
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A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-183 < KUR>
                                                                                                                                                                                                                                                                             submitted to the EMBL Data Library, July
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A; Reference number:
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6; Conserv
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RESULT 8
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hypothetical
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A; Title: The complete genome sequence of the hyperthermophilic, sulfate-reducin A; Reference number: A69250; MUID:98049343; PMID:9389475
A; Accession: H69441
                                                                                                                                                                                                                                                                                                                                                                                                                        carboxylesterase (est-2) homolog - Archaeoglobus fulgidus
C;Species: Archaeoglobus fulgidus
C;Date: 05-Dec-1997 #sequence_revision 05-Dec-1997 #text_change 18-Feb-2000
C;Accession: H69441
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H69441
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C;Species: Deinococcus radiodurans
C;Date: 03-Dec-1999 #sequence_revi
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                                                                                                                                                                                                                                                                                                                                                                                       R;Klenk, H.P.; Clayton, R.A.; Tomb, J.F.; White, O.; Nelson, K.E.; Ketchum, K.A.; Dodsor, Fleischmann, R.D.; Quackenbush, J.; Lee, N.H.; Sutton, G.G.; Gill, S.; Kirkness, E.F.
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aq_1956 -
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 Aquifex aeolicus
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L.; Utterback,
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A; Gene:
A; Cross-references: C; Superfamily: cytos
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A; Molecule type: mRNA
A; Residues: 1-287 <JUL>
                                                                A; Reference number: A; Accession: A21762
                                                                                R;Jullen, J.P.; Ramachandran, K.; Grosveld, F. Biochim. Biophys. Acta 825, 398-404, 1985
A;Title: Cloning of a cDNA encoding the smallest neurofilament
A;Reference number: A21762; MUID:85252830; PMID:3925999
                                                                                                                                              neurofilament triplet L protein - rat (fragment)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 27-Jul-1990 #sequence_revision 27-Jul-19
C;Accession: A21762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA Res. 5, 55-76, 1998

A; Title: Complete sequence and gene organization of the A; Reference number: A71000; MUID:98344137; PMID:9879194

A; Accession: G71032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hypothetical protein PH1551 - Pyrococcus horikoshii C;Species: Pyrococcus horikoshii C;Date: 14-Aug-1998 #sequence_revision 14-Aug-1998 C;Accession: G71032
                                                A; Status: preliminary
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A; Residues: 1-260 <AQF>
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:Deckert, G.; Warren, P.V.;
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;Date: 08-May-1998 #sequence_revision 08-May-1998 #text_change 08-Sep-2000
;Accession: E70467
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C; Genetics:
A; Gene: lin1453
C; Superfamily: /
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A;Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, E.; ok, C.; Schlueter, T.; Sinoes, N.; Tierrez, A.; Vazquez-Boland, J.A.; A;Title: Comparative genomics of Listeria species.
A;Reference number: AB1077; MUID:21537279; PMID:11679669
A;Accession: AD1614
                                                                                                                                                                                                                                                                                                                                   phosphoribosylamine-glycine ligase [imported] - Lactococcus lactis subsp. 1 C;Species: Lactococcus lactis subsp. lactis C;Date: 23-Mar-2001 #sequence_revision 23-Mar-2001 #text_change 03-Aug-2001 C;Accession: A86814 R;Bolotin, A.; Wincker, P.; Mauger, S.; Jaillon, O.; Malarme, K.; Weissenba Genome Res. 11, 731-753, 2001
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A86814
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C;Date: 27-Nov-2001 #sequence_revision
C;Accession: AD1614
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.; Dominguez-Bernal, G.; Duchaud, E.; Durand, L.; Dussurget, O.; Entian,
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A; Residues: 1-413 <STO>
A; Cross-references: GB.AE005176; PID:g12724511; PIDN:AAK05611.1;
A; Experimental source: strain IL1403
                                                                                                                                                                                                                                                                                      A;Title: The complete genome sequence of the lactic acid bacterium A;Reference number: A86625; MUID:21235186; PMID:11337471 A;Accession: A86814
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A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-389 <GLA>
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Voss, H.; Wehland
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A; Molecule type: protein A; Residues: 52-57 <SIH>
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A;Authors: Parry, C.; Quail, M.; Rutherford, K.; Simm A;Title: Complete genome sequence of a multiple drug A;Reference number: ABOSO2; PMID:11677608
A;Accession: AHIO30
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-492 <PAR>
A;Residues: 1-492 <PAR>
A;Cross-references: GB:AL513382; PIDN:CAD09345.1; PIDC;Genetics:
A; Experimental source: brain
A; Experimental source: brain
A; Experimental source: brain
A; Experimental source: brain
Brain Res. Mol. Brain Res. 1, 243-250, 1986
A; Title: Cloning and developmental expression of the murine neurofilament gene fami:
A; Reference number: A43772
A; Accession: A43772
A; Molecule type: mRNA
A; Residues: 1-5, 'Y', 7-8, 'Y', 10-64; 'M', 66-72, 'L', 74-98, 'D', 100-194, 'R', 196-202, 204-2:
A; Residues: 1-5, 'Y', 7-8, 'Y', 10-64; 'M', 66-72, 'L', 74-98, 'D', 100-194, 'R', 196-202, 204-2:
A; Rossidues: 1-5, 'Y', 7-8, 'Y', 10-64; 'M', 66-72, 'L', 74-98, 'D', 100-194, 'R', 196-202, 204-2:
A; Rocale type: mRNA
A; Note: the authors translated the codon CGC for residue 195 as Ala
R; Sihag, R.K.; Nixon, R.A.
Biol. Chem. 266, 18861-18867, 1991
A; Reference number: A41012; MUID:92011653; PMID:1717455
A; Accession: A44012; MUID:92011653; PMID:1717455
A; Accession: A44012
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C;Date:
C;Access
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Title: Anomalous placement of introns in a member of the A; Reference number: A25227; MUID:87064433; PMID:3785173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R; Lewis, S.A.; Cowan, N.J. Mol. Cell. Biol. 6, 1529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nature 413, 848-852, 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Cross-references: GB:M13016; A; Note: the authors translated
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A; Residues: 1-543 <LEW>
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                                                                                                                                                                                                                                                                                                                                             A; Cross-references: GB: X02165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Accession: A25227
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Date: 31-Mar-1988 #sequence_revision 30-Sep-1993 #text_change;
Accession: A25227; A25562; A43772; A41012; I55316
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drug resistant
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Ikenaka, K.; Wada, K.; Tamura,

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J. Biol. Chem. 265, 19786-19791, 1990
A;Title: Structure of the 68-kDa neurofilament gene and regulation of its expression.
A;Reference number: I55316; MUID:91060592; PMID:2246261
                                                                                                         A;Cross-references: GB:S70309; NID:g547176; PIDN:AAD14057.1; PID:g4261757 R;Nomata, Y.; Watanabe, T.; Wada, H.
J. Blochem. 93, 825-831, 1983
A;Title: Highly acidic proteins from human brain: purification and propert A;Reference number: A60703; MUID:83265667; PMID:6135695
A;Accession: A60703
                                                                                                                                                                                                                                                                                                                                                               R;Pospelov, V.A.; Pospelova, T.V.; Julien, J.P.

Cell Growth Differ. 5, 187-196, 1994
A;Title: AP-1 and Krox-24 transferription factors activate the neurofilament light gene pr
A;Reference number: I52832; MUID:94235564; PMID:8180132
A;Accession: I52832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R;Julien, J.P.; Grosveld, F.; Yazdanbaksh, K.; Flavell, D.; Meijer, D.; Mushynski, W. Biochim. Blophys. Acta 909, 10-20, 1987.
A;Title: The structure of a human neurofilament gene (NF-L): a unique exon-intron organi A;Reference number: S07144; MUID:87214213; PMID:3034332
A;Accession: S07144
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A; AGCESSACY.

A; Molecule type: protein

A; Residues: 469-472, D', 474 <NOM>
A; Experimental source: Glu-50 brain peptide

A; Experimental source: Glu-50 brain peptide
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A; Residues: 1-10 < PO
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A;Residues: 1-544 <JUL>
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;139-234/Domain: coll lb, alpha-helical rod #status predicted <Rla>;335-256/Region: linker la
;257-272/Domain: coll 2a, alpha-helical rod #status predicted <R2A>;273-281/Region: linker 2
;273-281/Region: linker 2
;282-401/Domain: coll 2b, alpha-helical rod #status predicted <R2A>;282-401/Domain: coll 2b, alpha-helical rod #status predicted <R2B>;404-543/Domain: tall <TAI>;404-543/Domain: tall subdomain a
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Residues: 1-5,'Y',7-8,'Y',10-28 <RES>
Cross references: GB.M55423; NID:g200027;
Comment: This is the most abundant of the
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Cross-references: GDB:120227; OMIM:162280

Gene: GDB:NEFL; NFL

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A;Map position: 8p21-8p21
A;Introns: 349/3; 391/2; 498/1
C;Superfamily: cytoskeletal keratin
C;Keywords: brain; colled coll; intermediate filament
C;Keywords: brain; colled college filament
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PIR; S04955; S04955
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Godovac-Zimmermann J., Conti A., Napolitano L.;
"The complete amino-acid sequence of dimeric beta-lactoglobulin mouflon (Ovis ammon musimon) milk.";
Biol. Chem. Hoppe-Seyler 368:1313-1319(1987).
-I- FUNCTION: LACTOGLOBULIN IS THE PRIMARY COMPONENT OF WHEY, IT BINDS RETINOL AND IS PROBABLY INVOLVED IN THE TRANSPORT OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-89374823; pubMed-2775495;
Erhardt G., Godovac-Zimmermann J., Conti A.
"Isolation and complete primary sequence of
beta-Lactoglobulin C.";
Biol. Chem. Hoppe-Seyler 370:757-762(1989).
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Pfam; PF00061;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUBUNIT: UNDER PHYSIOLOGICAL CONDITIONS BETA-LACTOGLOBULIN EXISTS AS AN EQUILIBRIUM MIXTURE OF MONOMERIC AND DIMERIC FORMS.
MISCELLANEOUS: ALTERNATE DISULFIDE BONDS OCCUR IN EQUAL AMOUNTS.
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-> Q (IN LACTOGLOBULIN 3-C).
BABC82E89E757333 CRC64;
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AC P3322

  RESULT 3
IF3_YERPE
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P33320;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TIGRFAMS; TIGRO0168; infC; PROSITE; PS00938; IF3; 1. Initiation factor; Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR001288; IF3. Pfam; PF00707; IF3; 1. ProDom; PD002880; IF3; 1.
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16-OCT-2001
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FUNCTION: IF-3 BINDS TO THE 30S RIBOSOMAL SUBUNIT AND SHIFTS THE EQUILIBRUM BETWEEN 70S RIBOSOMES AND THEIR 50S AND 30S SUBUNITS IN FAVOR OF THE FREE SUBUNITS, THUS ENHANCING THE AVAILABILITY OF 30S SUBUNITS ON WHICH PROTEIN SYNTHESIS INITIATION BEGINS. SUBUNITS MONOMER (BY SINILARITY).
SUBCELLULAR LOCATION: Cytoplasmic.
SIMULARITY: BELONGS TO THE IF-3 FAMILY.
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initiation factor IF-3.
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                                                                                                               STANDARD;
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IMPORTANT FOR 30S BINDING
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Pred. No.
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IMPORTANT FOR 30S BINDING
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RESULT 4
ATPF_CYAPA
ID ATPF_C
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DT 01-FEB
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DT 01-FEB
DT 01-FEB
CO CYANO
CO ATPF.
CO CYANO
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OX NCBI_T
RN [1]
RP SEQUEN
RA BIYANI
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Best Local
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P48084;
01-FEB-1996 (
01-FEB-1996 (
15-JUN-2002 (
ATP synthase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Genome sequence of Yersinia pestis, the causative agent of plague.";
Nature 413:523-527(2001).

-I- FUNCTION: IF-3 binds to the 30S ribosomal subunit and shifts the equilibrum between 70S ribosomes and their 50S and 30S subunits i favor of the free subunits, thus enhancing the availability of 30 subunits on which protein synthesis initiation begins.

-I- SUBCRILDIAR LOCATION: Cytoplasmic.
-I- SIMILARITY: BELONGS TO THE IF-3 FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      prentice M.B., Sebaihia M., James K.D., Churcher C., Mungall K.L., Baker S., Basham D., Bentley S.D., Brooks K., Cerdeno-Tarraga A.M., Chillingworth T., Cronin A., Davies R.M., Davis P., Dougan G., Feltwell T., Hamlin N., Holroyd S., Jagels K., Karlyshev A.V., Leather S., Moule S., Oyston P.C.F., Quail M., Rutherford K., Ieather S., Moule S., Oyston P.C.F., Quail M., Rutherford K., Stelton J., Stevens K., Whitehead S., Barrell B.G.; Simmonds M., Skelton J., Stevens K., Whitehead S., Barrell B.G.;
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STRAIN-CO-92 / Blovar Orientalis;
MEDLINE-21470413; PubMed-11586360;
Parkhill J., Wren B.W., Thomson N.R., Titball R.W., Holden
Parkhill J., Gahathia M., James K.D., Churcher C., Mungal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; AJ414152; CAC91237.1; -.
InterPro; IPRO01288; IF3.
Pfam; PF00707; IF3; 1.
TIGRPAMS; TIGR00168; infC; 1.
TIGRPAMS; TIGR0018; IS3; 1.
TROSITE; PS00938; IF3; 1.
Initiation factor; Protein biosynthesis; Complete proteome.
SEQUENCE 183 AA; 20936 MW; F6A924C89D0E858E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Hoinformatics and the Ew the European Bioinformatics Institute. There are no restrue by non-profit institutions as long as its content
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                                                                                                                                                                                  Cyanelle.
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                                                                                                                                               Eukaryota; Glaucocystophyceae;
NCBI_TaxID=2762;
                                                                                                                                                                                                  Cyanophora paradoxa.
   SEQUENCE FROM N.A
                                  Plant
                                                                               STRAIN-LB555 / Pringsheim;
Stirewalt V.L., Michalowski
                                                                                                                    SEQUENCE FROM N.A.
                                  Nucleotide sequence of the cyanelle I
lant Mol. Biol. Rep. 13:327-332(1995)
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Pred. No. 11;
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                                                                                                                                                                    Cyanophoraceae;
                                                                                   Loeffelhardt W.,
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                                                   Cyanophora paradoxa.
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Mungall K.L.,
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RA Basham D., Chillingworth T., Davies R.M., Feltwell T., Holroyd S., Ra Jagels K., Karlyshev A.V., Moule S., Pallen M.J., Penn C.W., RA Quail M.A., Rajandream M.A., Rutherford K.M., van Vliet A.H.M., RA Whitehead S., Barrell B.G., The genome sequence of the food-borne pathogen Campylobacter jejun Treveals hypervariable sequences.";

1. Nature 403:665-668(2000).
1. L. Nature 403:665-668(2000).
2. Phosphoribosyl)-AMP + diphospharte.
3. C. Phosphoribosyl)-AMP + diphosphate.
3. C. Phosphoribosyl)-5-[(5-phosphoribosyl)-AMP + H(2)0 = 1-(5-phosphoribosyl)-5-[(5-phosphoribosyl)-AMP + H(2)0 = 1-(5-phosphoribosyl)-4-[(5-phosphoribosyl)-AMP + H(2)0 = 1-(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-phosphoribosyl)-4-[(5-
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SEQUENCE
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Loeffelhardt W., Stirewalt V.L., Michalowski C.B., Annarelle Loeffelhardt W., Stirewalt V.L., Michalowski C.B., Annarelle Farley J.Y., Schluchter W.M., Chung S., Newmann-Spallart C., Steiner J.M., Jakowitsch J., Bohnert H.J., Bryant D.A.;
"The complete sequence of the cyanelle genome of Cyanophora the genetic complexity of a primitive plastid.";
(In) Schenk H.E.A., Herrmann R., Jeon K.W., Mueller N.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        i5-JUN-2002 (Rel. 41, Created)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
11-JUN-2002 (Rel. 41, Last annotation update)
11-JUN-2002 (Rel. 41, Last annotation update)
11-JUN-2002 (Rel. 41, Last sequence update)
11-JUN-2002 (Rel. 41, Last se
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STRAIN-NCTC 11168;
STRAIN-20150912; PubMed-10688204;
PARKHINI J., Wren B.W., Mungall K.,
Parkhini J., Wren B.W., Mungall K.,
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SUBUNIT: F-TYPE ATPASES HAVE 2 COMPONENTS, CF(1) - THE SUBUNIT: F-TYPE ATPASES HAVE 2 COMPONENTS, CF(1) CORE - AND CF(0) - THE MEMBRANE PROTON CHANNEL. CF(1) SUBUNITS: ALPHA(3), BETA(3), GAMMA(1), DELTA(1), EPSII HAS THREE MAIN SUBUNITS: A, B AND C. SUBCELLULAR LOCATION: CYANELLE THYLAKOID MEMBRANE. SIMILARITY: BELONGS TO THE ATPASE B CHAIN FAMILY.
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Pr00430; ATP-synt_B; 1.
gen ion transport, Transmembrane; CF(0); Cyanelle
gen ion transport, Transmembrane; CF(0); Cyanelle
gen 10n transport, Transmembrane; CF(0); CYanelle
gen 10n transport, Transmembrane; CF(0); CYanelle
gen 10n transport, Trans
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Best Local
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PUR2 LACLA STANDAKU;

09ZF44;
30-MAY-2000 (Rel. 39, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Phosphoribosylamine--glycine ligase (EC 6.3.4.13) (GARS) (Glycinamide Phosphoribosylamine-glycine ligase (EC 6.3.4.13) (GARS) (Glycinamide Phosphoribosylglycinamide synthetase).
   Nilsson D., Kilstrup M.;
"Cloning and expression of the Lactococcus lactis required for growth in milk.";
required for growth in milk.";
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SEQUENCE
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                                                                                                                                                                                   SEQUENCE FROM N.A.
STRAIN-IL1403;
                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. STRAIN-CHCC373;
                                                                                                                                                                                                                                                                                                                                                                                            Lactococcus lactis (subsp. lactis) (Streptococcus lactis).
Bacteria; Firmicutes; Lactobacillales; Streptococcaceae; Lactococcus
                                                                                                                                                               MEDLINE-21235186; PubMed-11337471;
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PHOSPHORIBOSYL-ATP PYROPHOSPHOHYDROLASE; F5E4E6374D6E99C1 CRC64;
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Pred. No.
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Query Match
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Pfam; PF01071; GARS; 1.
Pfam; PF02842; GARS_B; 1.
Pfam; PF02844; GARS_C; 1.
Pfam; PF02844; GARS_N; 1.
TIGREAMS; TIGR00877; purD; 1.
PROSITE; PS00184; GARS; 1.
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01-FEB-1995 (
01-FEB-1995 (
16-OCT-2001 (
Myosin heavy
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                                                                                                                                                                                                                                                                                                                                                                          Nakano M.Y., Stidwill R.P.;
Submitted (SEP-1994) to the EMBL/GenBank/DDBJ databases.
-I-FUNCTION: MYOSIN IS A PROTEIN THAT BINDS TO F-ACTIN 6
-ACTIVITY THAT IS ACTIVATED BY F-ACTIN.
-I- SIMILARITY: BELONGS TO THE MYOSIN HEAVY CHAIN FAMILY.
TO OTHER NON MUSCLE MYOSINS.
                                                                                                       InterPro; IPR002928; Myosin_tail.
Pfam; PF01576; Myosin_tail; 1.
Myosin; Muscle protein; Coiled co
                                                                                                                                                                   EMBL; L35595; AAA29216.1;
HSSP; P24733; 1WDC.
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01-FEB-1995 (Rel. 31, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation updat
Myosin heavy chain, clone 203 (Fragment).
Hydra attenuata (Hydra) (Hydra vulgaris).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hydridae; Hydra.
NCBI_TaxID=6087;
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EMBL; AE006382; AAK05611.1;
HSSP; P15640; IGSO.
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MEDLINE-95264348; PubMed-7745611;
Reeben M., Neuman T., Paslj J., Paslm K., Paslme V.,

"Characterization of the rat light neurofilament (NE
and identification of NGF and CAMP responsive region

"Neurosci. Res. 40:177-188(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Julien J.-P., Ramachandran K., Grosveld F.; "Cloning of a cDNA encoding the smallest neurofilament the rat.";
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P19527; Q63367;
01-FEB-1991 (Rel. 17, Crested)
01-OCT-1996 (Rel. 34, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Neurofilament triplet L protein (68 kDa neurofilament protein)
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MEDLINE-93366421; PubMed-8344946;
Dong D.L.-Y., Xu Z.-S., Chevrier
Hart G.W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Biochim. Biophys. Acta 825;398-404(1985).
[3]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. MEDLINE-90184052; Chin S.S., Liem R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Expression of rat neurofilament proteins NF-L transfected non-neuronal cells.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (Neurofilament light polypeptide) (NF-L). NEFL OR NFL OR NF68.
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                                                                                                                                                                                                               BIOL Chem. 268:16679-16687(1993).

PUNCTION: NEUROFILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, MAD H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER.

DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FOR CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH OTHER NEURONAL COMPONENTS OR IONS.

PYM: O-GLYCOSYLATED; CONTAINS THREE N-ACETYLGLUCOSAMINE SIDE CHAINS.
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NEUROFILAMENT PROTEINS
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SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its
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L Biol. 50:475-490(1989).
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ent (NF-L) gene promoter
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NFL_MOUSE STANDARD,

01-AUG-1988 (Rel. 08, Created)

01-OCT-1993 (Rel. 27, Last sequence update)

16-OCT-2001 (Rel. 40, Last annotation update)

Neurofilament triplet L protein (68 kDa neurofilament

Neurofilament light polypeptide) (NF-L).
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or send a
                                                                     "Anomalous placement of introns in a member of the intermediate filament multigene family: an evolutionary conundrum."; Mol. Cell. Biol. 6:1529-1534(1986).
                                                                                                                                                                                                                                                                                                Mus musculus (Mouse)
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GlycoSuiteDB; P19527; -.
                                                                                                                                                                                                 SEQUENCE FROM N.A.
TISSUE-Brain;
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J. Biol. Chem. 265:19786-19791(1990).

J. Biol. Chem. 265:19786-19791(1990).

I FUNCTION: NEUROFILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, M AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER.

I DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH.

THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FOR A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH
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                                                                                                                                         DOMAIN
                                                                                                                                                                                                                                 Intermedi
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Lewis S.A., Cowan N.J.;
"Genetics, evolution, and expression of the 68,000-mol-wt
                                                                                            DOMAIN
                                                                                                                                                                                                                       DOMAIN
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Brain Res. 3
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Julien J.-P., Meyer D., Flavell D.
"Cloning and developmental express
                                                                                 CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                             between
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; M20480;
;; M13016;
;; M55423;
A25227; C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION VOTHER NEURONAL COMPONENTS OR IONS.
MISCELLANEOUS: N°-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPTITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC
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PS00226; IF; 1.
late filament; Coiled
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IPR001664; IF.
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TAIL, SUBDOMAIN B (ACIDIC).

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EPITOPE (RECOGNIZED BY IF-SPECIFIC MONOCLONAL ANTIBODY).

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RA Mersiyanova I.V., Perepelov A.V., Polyakov A.V., Sitnikov V.F.,

RA Mersiyanova I.V., Perepelov A.V., Polyakov A.V., Sitnikov V.F.,

RA Mersiyanova I.V., Perepelov A.V., Evgrafov O.V.;

RA Dadali E.L., Oparin R.B., Petrin A.N., Evgrafov O.V.;

RT Panew variant of Charcot-Marie-Tooth disease type 2 is probably the result of a mutation in the neurofilament-light gene.";

RT - I. Hum. Genet. 67:37-46(2000).

C. I. FURCTION: NEUROFILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L. M.

C. I. FURCTION: NEUROFILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L. M.

C. I. FURCTION: NEUROFILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT FORM ALL OTHER INTERMEDIATE FILAMENT FORM ALL OTHER INTERMEDIATE FILAMENT FORM

C. I. FURCHARDEUS: NEUROS TRUCTURE SUITABLE FOR INTERACTION WITH DESEASE: DEFECTS IN NEFL ARE A CAUSE OF CHARCOT-MARIE-TOOTH DESEASE TYPE 2E (DMT2E).

C. INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM FILAMENTS: BELONGS TO THE INTERMEDIATE FILAMENTS: SILLAMENTS: THE MOST ABUNDANT OF THE THREE INTERMEDIATE FILAMENTS: SILLAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM FILAMENTS: SILLAMENTS: SILLAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM FILAMENTS: SILLAMENT PROTEINS AND AS THE OTHER NOUSPITHELIAL INTERMEDIATE FILAMENTS: SILLAMENT PROTEINS AND AS THE OTHER NOUSPITHELIAL INTERMEDIATE FILAMENTS: SILLAMENT PROTEINS AND AS THE OTHER NOUSPITHELIAL INTERMEDIATE FILAMENTS THE MOST ABUNDANT OF THE THREE INTERMEDIATE FILAMENT PROTEINS AND AS THE OTHER NOUSPITHELIAL INTERMEDIATE FILAMENT FAMILY.

C. I. DATABASE: NAME-INDERICATE PILAMENT FAMILY.
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MEDLINE-87214213; PubMed-3034332;
MEDLINE-87214213; PubMed-3034332;
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16-0CT-2001 (Rel. 40, Last annotation update)
Neurofilament triplet L protein (68 kDa neurofilament
(Neurofilament light polypeptide) (NF-L).
MEFL OR NF6 NFL OR NF68.
HOMO sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; EuMammaila; Eutheria; Primates; Catarrhini; Hominidae; Homore Control of the cont
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss institute of Bioinformatics and the EMBL outstation the European Bioinformatics institute. There are no restrictions on its the European Bioinformatics institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE-94235564; PubMed-8180132; Pospelova T.V., Julien J.-P.; Pospelova T.V., Julien J.-P.; RAP-1 and Krox-24 transcription factors activate the light gene promoter in P19 embryonal carcinoma cells. Cell Growth Differ. 5:187-196(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "The structure of a human neurofilament intron organization in the intermediate Blochim. Biophys. Acta 909:10-20(1987).
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                                                                                                                                                                                             DATABASE: NAME-Inherited peripheral neuropathies WWW-"http://molgen-www.uia.ac.be/CMTMutations/".
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R -> A (IN REF. 1).
MISSING (IN REF. 2).
Y -> I (IN REF. 1)...
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                                                                                            "The complete amino acid sequence of neurofilament protein (NF-L).";
FEBS Lett. 182:475-478(1985).
[2]
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SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MIM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               modified and this statement is not removentities requires a license agreement (S or send an email to license@isb-sib.ch).
           SEQUENCE OF 1-82 AND 278-548.

Geisler N., Kaufmann E., Fischer S., Plessmann U., Weber K.;

"Neurofilament architecture combines structural principles of
Intermediate filaments with carboxy-terminal extensions increasing
in size between triplet proteins.";

EMBO J. 2:1295-1302(1983).
                                                                                                                                                                                                                                                                      NFL_PIG STANDARD; PRT; 548 I P02547; P02547;
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INIT_MET 0
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Mammalia; Eutheria;
NCBI_TaxID=9823;
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Geisler N., Plessi
                                                                                                                                                                              SEQUENCE
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; S70309; AAD14057.1;
S07144; S07144.
  FUNCTION: NEUROFILAMENTS USUALLY CONTAIN THREE
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PS00226; IF; 1.
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LINKER 1.
COIL 1B.
LINKER 1.
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COIL 2A.
LINKER 2.
COIL 2B.
TAIL, SUBDOMAIN A.
TAIL, SUBDOMAIN A.
TAIL, SUBDOMAIN A.
O-LINKED (GLCNAC) (BY SIMILARITY).
O-LINKED (GLCNAC) (BY SIMILARITY).
EPITOPE (RECOGNIZED BY IF-SPECIFIC MONOCLONAL ANTIBODY).
Q -> P (IN CMTZE).
Q -> P (IN CMTZE).
Q -> PTId-VAR_009703.
MW; 7A0F1ADD5BED22F6 CRC64;
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Pred. No. 35;
Nismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                              AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER. DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FOR A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH OTHER NEURONAL COMPONENTS OR IONS.

MISCELLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM
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               Similarity
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548
100.0%;
ilarity 100.0%;
Conservative C
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Pred. No. 35;
0; Mismatches
                                                                                  TAIL, SUBDOMAIN A.
TAIL, SUBDOMAIN B (ACIDIC).
O-LINKED (GLCNAC) (BY SIMILARITY).
O-LINKED (GLCNAC) (BY SIMILARITY).
EPITOPE (RECOGNIZED BY IF-SPECIFIC MONOCLONAL ANTIBODY).
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NEALEK σ 330

21-JUL-1986 01-NOV-1997 16-OCT-2001 Isobe T., Okuyama T.;
"Brain micro glutanic acid-rich protein neurofilament 68-kDa protein sequence."; NFL_BOVIN P02548; P7 SEQUENCE FROM N.A.
STRAIN-HOISTEIN; TISSUE-Brain;
Hill W.D., Zhang L., Balin B.J
Submitted (FEB-1997) to the EM SEQUENCE OF 468-554.
MEDLINE-85154567; Pu
Isobe T., Okuyama T. Mammalia; Eutheria; Bovidae; Bovinae; Bo (Neurofilament 1 NCBI_TaxID=9913; Eukaryota; Bos taurus protein). P79127; (Bovine). Metazoa; 182:389-392(1985). (Rel. 01, Created)
(Rel. 35, Last sequence update)
(Rel. 40, Last annotation update)
int triplet L protein (68 kDa neurofilament protein)
ment light polypeptide) (NF-L) (Micro glutamic acid-STANDARD; Bos. PubMed=3884373; T.; Chordata; Craniata; Vertebrata; Euteleostomi; Cetartiodactyla; Ruminantia; Pecora; Bovoidea Balin B.J., Sprinkle T.J. to the EMBL/GenBank/DDBJ PRT; protein Sprinkle T.J.; tein is the determined S 5 4 ₿ databases C-terminal endpiece by the primary acid-rich Bovoidea.

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Q1-JUN-1994
16-QCT-2001
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TISSUE-Brain;
MEDLINE-93224534; PubMed-8468353;
ALL-- O GABARA Y., Miyake T., Teraoka
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the European Bioinformatics Institute. There are no restrictions on its
use by non-profit institutions as long as its content is in no way
modified and this statement is not removed. Usage by and for commercial
entities requires a license agreement (See http://www.isb-sib.ch/announce/
or send an email to license@isb-sib.ch).
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                                                                       SEQUENCE FROM N.A.
                                                                                                               NCBI_TaxID-93934
                                                                                                                                       Coturnix
                                                                                                                                                         Archosauria;
                                                                                                                                                                         Eukaryota;
                                                                                                                                                                           Coturnix coturnix j
Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                 Neurofilament
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INIT_MET
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Pfam; PF00038; f1lament; 1.
PROSITE; PS00226; IF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; U83919; AAB41543.1; -.
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DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH
THE NEUROPILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT
PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FO
A CHARGED SCAPFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH
OTHER NEURONAL COMPONENTS OR IONS.

MISCELLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE
NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL
INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NEALEK 331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NEALEK 6
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                                                                                                                                                                                                                                                             (Rel. 28, (Rel. 29, (Rel. 40, ))
                                                                                                                                                         Aves;
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                                                                                                                                                       japonica (Japanese quail).
a; Chordata; Craniata; Vertebrata;
; Neognathae; Galliformes; Phasian
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L protein (Neurofilam
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COIL 1A.

LINKER 1.

COIL 1B.

LINKER 12.

COIL 2A.

LINKER 2.

COIL 2B.

TAIL, SUBDOMAIN A.

TAIL, SUBDOMAIN B (ACIDIC).

MISSING (IN REF. 2).

A -> AEA (IN REF. 2).

MISDING CACCOLA CRC64;
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Pred. No. 36;
); Mismatches
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Y SIMILARITY.
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           H:
                                                                                                                                                                                                                                                               polypeptide)
                                                                                                                                                           Phasianinae;
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Best Local
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DOMAIN
DOMAIN
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15-DEC-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      neurofilament-L gene.",
J. Cell Biol. 121:387-395(1993).

1. Cell Biol. 121:387-395(1993).

1. FUNCTION: NEUROFILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, N-
1. FUNCTION: NEUROFILAMENTS OUTHER MAINTENANCE OF NEURONAL CALIBER
1. DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH
1. DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT ARENT FILAMENT
THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERNEDIANE FILAMENT
PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FO
           SEQUENCE FROM N.A.
MEDLINE-98094267; PubMed-9434178.
Niehaus F., Frey B., Antranikian
                                                         Thermococcus.
NCBI_TaxID=110163;
                                                                                                                      DNA polymerase
                                                                                                                                                                                                                                                                                                                                          SEQUENCE
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                                                                                     Archaea;
                                                                                               Thermococcus sp
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DISEASE: NF-L DEFICIENCY CAUSES THE DISORDER QUIVER.
MISCELLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPTHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC FILAMENTS.
SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY.
                                                                                                                                                                                                                                            NEALEK
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TE; PS00226; IF; 1.
mediate filament; Coiled
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   and
                                                                                   Euryarchaeota;
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   characterisation
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                                                                                                                                                                                 STANDARD;
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37, Last sequence 41, Last announce 2C 2.7.7.7).
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erisation of
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                                                                                     Thermococci; Thermococcales;
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COIL 1B.
LINKER 12.
COIL 2A.
LINKER 2.
COIL 2B.
TAIL, SUBDOMAIN A.
TAIL, SUBDOMAIN B.
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TAIL (BY SIMILARITY).
COIL 1A.
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a thermostable alpha-DNA
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on update)
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                                                                                     Thermococcaceae;
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Best Local :
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SMART; SM00486; POLBC; 1.

SMART; SM00486; POLBC; 1.

TIGRFAMS; TIGR00592; pol2; 2.

PROSITE; PS00116; DNA_POLYMERASE_B; FALSE_NEG.

PROSITE; PS00818; INTEIN_CTER; 3.

PROSITE; PS50819; INTEIN_ENDONUCLEASE; 2.

PROSITE; PS50817; INTEIN_LTER; 3.

Transferase; DNA-directed DNA polymerase; DNA replication;
DNA-binding; Hydrolase; Endonuclease; Autocatalytic cleavage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bloinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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SEQUENCE FROM N.A.
STRAIN-UAB CTIP;
MEDLINE-21267165; PubMed-11353084;
                                               MYPU_0500.
MYCOplasma pulmon1s.
Bacter1a; Firmicutes; Mollicutes; Mycoplasmataceae; Mycoplasma
NCBI_TaxID-2107;
                                                                                               15-JUN-2002 (Rel. 41, Created)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation updat
Hypothetical protein MYPU_0500.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pfam; PF00136; DNA_pol_B; 4.
Pfam; PF03104; DNA_pol_B_exo; 1.
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                                                                                                                                                                                 MYCPO
                                                                                                                                                                                                                                                                                                                                   SEQUENCE
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                                                                                                                                                                 050_MYCPU
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SIMILARITY: BELONGS TO THE DNA POLYMERASE TYPE-B FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (DNA)(N).
                                                                                                                                                                                                                                                                                6; Conserve
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IPR003586; Hedgehog_hintC.
IPR003587; Hedgehog_hintN.
IPR002203; Intein.
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INTEIN I.
DNA POLYMERASE, 1
INTEIN II.
DNA POLYMERASE, 1
INTEIN III.
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W; All3A8BC57EB9CB3 CRC64;
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                                                                                                                                                                                                                                                                                                           Length 1829;
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                                                                                                      Query Match
                                                                       Matches
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                                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation—the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                     Mycoplasma pulmonis.";
Nucleic Acids Res. 29:2145-2153(2001).
-!- SIMILARITY: BELONGS TO THE UPF0133 FAMILY.
                                                                                                                                    Pfam; PF02575; DUF149; 1.
TIGREAMS; TIGR00103; Cons_hypoth103; 1.
Hypothetical protein; Complete proteome.
SEQUENCE 100 AA; 11656 MW; 18A2B661EEB40680 CRC64;
                                                                                                                                                                                                          EMBL; AL445563; CAC13223.1; ...
MypuList; MYPU_0500; ...
InterPro; IPR004701; Cons_hypoth103.
InterPro; IPR003727; DUF149.
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76 NEAMEK 81
                                                                      Local Similarity
les 5; Conserv
                   1 NEALEK 6
                                                                       Conservative
                                                                                       93.1%;
83.3%;
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                                                                                       Score 27; DB 1; Length 100; Pred. No. 17;
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Search completed: November 13, Job time : 5.97872 secs

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Q9q11 human immun
Q9q116 human immun
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QRRB86

ID QRB86

RC QRRB86;

DT Q1-JUN-2002 (TTEMBLrel. 21, Created)

DT Q1-JUN-2002 (TTEMBLrel. 21, Last sequence update)

DT Q1-JUN-2002 (TTEMBLrel. 21, Last annotation update)

DT Q1-JUN-2002 (TTEMBLREL)

DE GEOTEMER FIRMICLES; Bacillus/Clostridium group; Clost Q1

Thermoanaerobacteriales; Thermoanaerobacteriaceae; Therefore CX

NCBL_TAXID=119072;

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RP SEQUENCE FROM N. A.

STRAIN-MB4T / JCM11007;

RX MEDLINE-2199816; pubMed=11997336;

RX MEDLINE-2199816; pubMed=11997336;

RA GLEN Y. Xu Y. Lat X., Huang L., Dong X., Ma Y. Lat X., Huang L., Lat X., Huang L., Lat X
   RESULT 2
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STRAIN-MB4T / JCM11007;

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K MEDILINE-21992816; PubMed-11997336;

K MEDILINE-21992816; PubMed-11997336;

K MEDILINE-2199281; June 2., Yu Z., Xuan Z., Hu S., Dong W.,

A Tan H., Chen R., Wang J., Yu J., Yang H.;

Tan H., Chen R., Wang J., Yu J., Yang H.;

Tan H., Chen R., Wang J., Yu J., Yang H.;

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Tan H., Chen R., Wang J., Yu J., Yang H.;

Tan H., Chen R., Wang J., Yu J., Yu J., Yang H.;

Tan H., Chen R., Wang H.;

Tan H., Yu J., Yu J.,
   Q9QFL4;
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Bacteria; Firmicutes; Bacillus/Clostridium group; Clostridia;
Thermoanaerobacteriales; Thermoanaerobacteriaceae; Thermoanaerobacter.
NCBI_TaxID=119072;
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Best Local :
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Morris A., Marsden M., Halcrow K., Hughes E.S., Brettle R.P.,
Bell J.E., Simmonds P.;
"Mosaic structure of the human immunodeficiency virus type 1 genome
infecting lymphoid cells and the brain: evidence for frequent in viv
recombination events in the evolution of regional populations.";
J. Virol. 73:8720-8731(1999).
EMBL; AF174987; AAF00333.1;
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01-MAY-2000
01-MAR-2002
                                                                                                                                                                                                   AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
NCBI_TaxID=11676;
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EMBL; AF174,984; AAF000330.1; ---
INTERPO; IPR00071; Retrovir_p17.
Pfam; PF00550; Gag_p17; 1
PFRNNTS; PR00234; HIVIMATRIX.
                                                                                                                                     SEQUENCE
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Pfam; PF00540; Gag_p17; 1.
PRINTS; PR00234; HIVIMATRIX.
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01-MAY-2000
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Bell J.E., Simmonds P.;
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130 AA;
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128 AA;
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Pred. No. 58;
0; Mismatches
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C90FT1;
C90FT1;
C90FT1;
C1-MAY-2000 (TrEMBLrel. 13, Cr.
F 01-MAY-2000 (TrEMBLrel. 13, La
T 01-MAY-2002 (TrEMBLrel. 20, La
T 01-MAY-2002 (TrEMBLrel. 20, La
                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local
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01-JAN-1998
01-JAN-1998
01-MAR-2002
                                     ATES: PRO0234; HIVIMATRIX.
                                                            "Mosaic structure of the human immunodeficiency virus type 1 genome infecting lymphoid cells and the brain: evidence for frequent in vivrecombination events in the evolution of regional populations."; J. Virol. 73:8720-8731(1999).

EMBL; AF174917; AAF00263.1; ...
EMBL; IPR000071; Retrovir_p17.
                                                                                                                                                                                                                                                                                                                                                                                                                          NON_TER
NON_TER
SEQUENCE
                                 AIDS;
                                                                                                                           Morris A., Marsden M., Halcrow
Bell J.E., Simmonds P.;
                                                                                                                                                  MEDLINE-99412391;
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                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                      Viruses;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR000071; Retrovir_p17. Pfam; PF00540; Gag_p17; 1. AIDS; Core protein; Polyprotein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "The molecular epidemiology of human immunodeficiency virus type 1 in six cities in Britain and Ireland."; Virology 235:166-177(1997).
EMBL; AF014340; AAC58421.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE-97445059; PubMed-9300048;
Leigh Brown A.J., Lobidel D., Wade C.M.,
Brettle R.P., France A.J., Leen C.S., McM
Maw R.D., Mulcahy F., Robertson J.R., San
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Viruses; Retroid
NCBI_TaxID=11676;
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Viruses; Retroid viruses; Retroviridae;
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131 AA;
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 AA;
                                                                                                                                     PubMed=10482626;
n M., Halcrow K.,
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                                "Mosaic structure of the human immunodeficiency virus type 1 genome infecting lymphoid cells and the brain; evidence for frequent in vivrecombination events in the evolution of regional populations."; J. Virol. 73:8720-8731(1999).

EMBL: AF174919; AAF00265.1; ...
                                                                                                                                                                                                                            MEDLINE-99412391; PubMed-10482626; Morris A., Marsden M., Halcrow K., Bell J.E., Simmonds P.;
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Q9QFS5;
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Q9QFS8;
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01-MAY-2000
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                                                              Human immunodeficiency virus type 1.
Viruses; Retroid viruses; Retroviridae;
NCBI_TaxID=11676;
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PRINTS; pr00234; HIVIMATRIX.

AIDS; Core profein.
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STRAIN-CP9;
MEDLINE-99412391; PubMed-10482626;
Morris A., Marsden M., Halcrow K.,
                                                                                                                                                                                                                                                                                                                                                                                                                recombination events in the evolution J. Virol. 73:8720-8731(1999).
EMBL; AF174920; AAF00266-1; -
InterPro; IPR000071; Retrovir_p17.
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                                           SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                          SEQUENCE
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NCBI_TaxID=11676;
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AIDS; Core protein; Polyprotein.
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132 AA;
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4; HIV1MATRIX.
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EMBLrel. 13,
EMBLrel. 20,
1 (Fragment).
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01-MAY-2000
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Q9QFZ9;
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SEQUENCE
                                           GAG polyprotein
      Human
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EMBL; AF174848; AAF00863.1;
Thtorpro; IPR000071; Retrov
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PRINTS; PR00234; HIV1MATRIX.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AIDS;
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Bell J.E., Simmonds P.,
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InterPro; IPR000071; Retrovir_p17.
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6; Conservative (
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133 AA;
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132 AA;
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n M., Halcrow K.,
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Pred. No. 59;
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Q9QFZ8;
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infecting lymphoid cells and the brain: e
recombination events in the evolution of
J. Virol. 73:8720-8731(1999).
EMBL; AF174850; AAF00865.1; -
InterPro; IPR000071; Retrovir_p17.
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Viruses; Retroid viruses; Retroviridae;
NCBI_TaxID=11676;
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                                                                                                                                                                                                                                           Pfam; PF00540; Gag_p17; 1.
PRINTS; PR00234; HIV1MATRIX.
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Bell J.E., Simmonds P.,
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Bell J.E., Simmonds P.
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01-MAY-2000 (TrEMBLrel. 13,
01-MAY-2000 (TrEMBLrel. 13,
01-MAR-2002 (TrEMBLrel. 20,
                                                                                                                                                                                                                                                                                                                                                                                                         Morris A., Marsden M., Halcrow K., Hughes E.S., Brettle R.P., Bell J.E., Simmonds P.; "Mosaic structure of the human immunodeficiency virus type 1 genome infecting lymphoid cells and the brain: evidence for frequent In vivrecombination events in the evolution of regional populations."; "J. Virol. 73:8720-8731(1999)."
J. Virol. 73:8720-8731(1999).
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J. Virol. 73:8720-8731(1999).
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Morris A., Marsden M., Halcrow K.,
Bell J.E., Simmonds P.;
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PRINTS; PR00234; HIV1MATRIX.
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Pfam; PF00540;
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Viruses; Retroid viruses; Retroviridae;
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01-MAY-2000
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InterPro; IPR000071; Retrovir_p17.
Pfam; PF00540; Gag_p17; 1.
PRINTS; PR00234; HIVIMATRIX.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 recombination events in the evolution of regional populations.";
J. Virol. 73:8720-8731(1999).
EMRI. AR174854. NECOSO.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                PRINTS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Morris A., Marsden M., Halcrow K., Bell.J.E., Simmonds P.;
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ALIGNMENTS

Test antigen #2 for spongiform and demyelinating disease diagnosis

17-OCT-2000 AAB05926;

(first entry)

RESULT 1 AAB05926

AAB05926 standard; peptide; 7 AA

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Human; cow; myelin; myelin neurofilament; immunogen; antigen; bovine spongiform encephalopathy; BSE; multiple sclerosis; Creutzfeld-Jacob disease; CJD; demyelinating disease; diagnostic test.
                     WPI; 2000-400194/34.
                                                                                                                           Bos taurus.
Homo sapiens.
                                                  (UNLO ) KING'S
                                                                 26-NOV-1998;
                                                                               25-NOV-1999;
                                                                                              02-JUN-2000
                                                                                                             WO200031545-A1
                                                   COLLEGE.
                                                                 98GB-0025948
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Diagnosing spongiform or demyelinating disease in vertebrates such as bovine spongiform encephalopathy and Creutzfeld-Jacob disease comprises

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                                                                                                                                                                                                                                                                                                                                                                           frameshift mutation; age-related disease; neurodegenerative disorder; Alzheimer's disease; Down's syndrome; myotonic dystrophy; neuronal; Huntington's disease; muttiple sclerosis; alcoholic liver disease; diabetes mellitus type II; microtubule associated protein; Tau; Big Tau; biquitin B; apolipoprotein E; MAP2; neurofilament-T; neurofilament-M; neurofilament-T; presentlin II; cellular tumour antigen; plial fibrillary acidic protein; GFAP; p53; semaphorin III; HUPF-1; bcl-2; B-cell leukemis/lymphoma 2 proto-oncogene; HMGP-0; NSP-A; high mobility.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     spongiform encephalopathy (BSE), multiple sclerosis (MS) and Creutzfeld-Jacob disease (CJD). Peptides used in the kit are antigeni components of myelin neurofilaments. Biological samples are assayed for antibodies, especially IgA antibodies, which bind to myelin and/or myelin neurofilaments or an antigenic peptide, such as present sequence. Any reading in excess of two standard deviations of the healthy controls would indicate a positive response.
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                                      Diagnosing disease by corresponding protein neurological diseases, for treatment and prev
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  Disclosure;
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antibodies
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      biological sample for myelin and/or myelin neurofilament
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                                      detecting frameshift mutations in RNA or mutations - used to diagnose cancer and , particularly Alzheimer's disease, and also vention with specific ribozymes or wild-type
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CC caused by, or associated with, an RNA molecule that has a frameshift cc mutation. The method is used to disapose age-related diseases, especially cancer and a wide range of neurodegenerative disorders (e.g. Alzhelmer's CC multiple sclerosis, alcoholic liver disease, that has a frameshift cc multiple sclerosis, alcoholic liver disease, diabetes mellitus type II cc and many others listed) or susceptibility to these disorders. The method cc allows a definitive diagnosis of Alzhelmer's disease in living patients, caused by mutations in RNA rather than DNA. The invention describes the cc used of neuronal system RNA molecules, specifically proteins including correctins Tau and Big Tau, ubiquitin B, apolipoprotein E, microtubule associated protein 2 (MAP2), neurofilament-L, neurofilament-M, acidic correctin (GFRP), the cellular tumour antigen p53, B-cell leukemia/lymphoma cc protein-C (HMGP-C) and neuroendocrine specific protein A.
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                                                                                                                N-PSDB;
                                                                                                                                                           Ota
A
                                                                                                                                                                                                                                             07-JUL-2000;
                                                                                                                                                                                                                                                                                        EP1130094-A2
                                                                                                                                                Wakamatsu
                                                                                                                                                                                                                                                                  05-SEP-2001
                                                                                                                                                                                                                                                                                                              Homo
                                                                                                                                                                                                                                                                                                                                  Human; full length
                                                                                                                                                                                                                                                                                                                                                      Human polypeptide,
                                                                                                                                                                                                                                                                                                                                                                            06-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                 AAM93466;
                                                                                                                                                                                                                                                                                                                                                                                                                     AAM93466 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                               (HELI-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          262
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 LKKVHEE
                                                                                                                                                           H
                                                                                Primers useful for synthesizing full length in genetic manipulation -
                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LKKVHEE
                                                                                                                2001-524255/58
)B; AAK94387.
                                                                                                                                                          Nishikawa
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity 100 7; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              441 AA;
                                                                                                                                                                                                  99JP-0194486.
2000JP-0118774.
2000JP-0183765.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          268
                                                                                                                                                                                                                                              2000EP-0114089
                                                                                                                                                                                                                                                                                                                                                                            (first entry
                                                                                                                                               Sugiyama
                                                                                                                                                           H
                                                                                                                                                                                                                                                                                                                                  cDNA; cDNA synthesis; oligo-capping.
                                                                                                                                                                                                                                                                                                                                                      SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%;
                                                                                                                                                          Isogai T,
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Ö
                                                                                                                                               Nagai
                                                                                                                                                                                                                                                                                                                                                                                                                      543
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                        3132
                                                                                                                                               Hayashi K,
. K, Kojima
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60,
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                                                                                                                                                          Ishii S,
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                                                                                            cDNA clones
                                                                                                                                                Otsuki
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                                                                                                                                                          Kawai Y;
                                                                                            and
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The invention relates to primers are the invention relates to primers and a human protein have bee clones. 830 cDNA molecules encoding a human protein have bee isolated and nucleotide sequences of 5'- and 3'-ends of the molecules have been determined. Primers for synthesising the cDNA are useful for clarifying the function of the protein e

the full encoded

length

CDNA

CDNA

Claim

8

SEQ ID

NO 3132; 1380pp + sequence listing;

English

primers for synthesising full length

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RESULT 4
ABB79475
ID ABB7
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Matches 7
                                                 . Query Match
.Best Local S
Matches 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the cDNA. The full length clones were obtained by construction of full length enriched cDNA libraries that were synthesised by the oligo-capping method. The primers enable the production of the full length cDNA easily without any special methods. The present sequence is a polypeptide encoded by a full length human cDNA of the invention.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in CD-ROM format directly from EPO.
                                                                                                                       The present invention relates to novel human replication start codon initiation recognition compound subunit Orc4Lp (HsORC4L) 47 (see ABB79474). This protein and its coding sequence are useful the treatment of diseases such as cancer and HIV infection. The present sequence is an N-terminal peptide fragment of the protein which was used in an example from the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                   Sequence
                                                                                                                                                                                                                                                      Polypeptide-human replication start codon initiation recognition compound subunit Orc4Lp (HsORC4L)47.3 and polynucleotide for coding
                                                                                                                                                                                                                                                                                             WPI;
                                                                                                                                                                                                                                                                                                                                                                                               26-JUN-2000; 2000CN-0116778
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CN1331153-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Replication start codon initiation recognition compound; Orc4Lp; HsORC4L; cancer; cytostatic: HIV infection; anti-HIV; virucide;
                                                                                                                                                                                                                  Example
                                                                                                                                                                                                                                                                                                                      Mao Y,
                                                                                                                                                                                                                                                                                                                                                                      26-JUN-2000; 2000CN-0116778
                                                                                                                                                                                                                                                                                                                                                                                                                         16-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 human; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human Orc4Lp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-SEP-2002
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                         LKKVHEE 7
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                                                  Similarity
6; Conserv
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7; Conser
                                                                                                                                                                                                                  Page 20 (Disclosure); 33pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               543 AA;
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                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   47.3 N-terminal peptide fragment.
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                                                  Score 33; DB Pred. No. 7.5; 1; Mismatches
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No.
                                                             DB
7.5;
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31-MAR-1999; 02-APR-1999; 05-APR-1999; 30-MAR-2000;

2000US-0540763

99US-0127607. 99US-0127636. 99US-0127728.

31-MAR-2000; 2000WO-US08621.

05-OCT-2000

Shimkets RA,

Leach

2000-602362/57. AAC76489

(CURA-) CURAGEN CORP.

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vulnerary; antipsoriatic; antiparkinsonian; nootropic; neuroprotective; anticonvulsant; osteopathic; antiarthritic; immunosuppressant; cardiant; immunostimulant; thrombolytic; coagulant; vasotropic; antidiabetic; hypotensive; dermatological; immunosuppressive; antidiabetic; hypotensive; dermatological; immunosuppressive; antiinflammatory; antiviral; antibacterial; antifungal; antirheumatic; antihyroid; antianaemic; gene therapy; cancer; proliferative disorder; hypotremsion; neurodegenerative disorder; osteoarthritis; graft vs host disease; cardiovascular disease; diabetes mellitus; hypothyroidism; SCID; AIDS; cholesterol ester storage; systemic lupus erythematosus; infection; severe combined immunodeficiency; malaria; autoimmune disorder; asthma; allergy; aplastic anaemia; noctural haemoglobinuria; burn; wound;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAB42280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAB42280 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 bone damage; cartilage damage; antlinflammatory disease; coagulation;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hepatotropic;
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Novel nucleic acids and peptides derived from open reading useful for treating e.g. cancers, proliferative disorders, neurodegenerative disorders and cardiovascular disease frame X,

Claim 11; Page 3278; 5507pp; English.

cc which represent the human OFFX open reading frames 1 to 3161. The OFFX cc sequences have activities such as: cytostatic; hepatotropic; vulnerary; cc antipsoriatic; antiparkinsonian; nootropic; neuroprotective; costeopathic; anticonvulsant; antiarthritic; immunosuppressant; cc immunostimulant; cardiant; thrombolytic; cosquiant; vasotropic; cc antiinflammatory; antibacterial; antiviral; antifungal; antirheumatic; cantiinflammatory; antibacterial; antiviral; antifungal; antirheumatic; cc antiinflammatory; antibacterial; antiviral; antifungal; antirheumatic; cc antithyroid; and antianaemic. The sequences can be used for determining ct the presence of or predisposition to, or preventing or treating cc the presence of or predisposition to, or preventing or treating cc pathological conditions associated with an OFFX-associated disorder. The nucleic acids can be used to express OFFX proteins in gene therapy certors. The proteins and nucleic acids may be used to treat cancers, crotiferative disorders, neurodegenerative disorders, osteoarthritis, cc praft vs host disease, cardiovascular disease, diabetes mallitus, compertien to severe combined immunodeficiency (SCID), AIDS, vital, cardierial; infection, malaria, autoimmune disorders, asthma, conternal haemoglobinuria, antiinflammatory disease; to enhance conturnal haemoglobinuria, antiinflammatory disease; to enhance AAC74446 to AAC77606 encode the proteins to inhibit thrombosis; and as a contraceptive given in AAB40237 to AAB43397, ing frames 1 to 3161. The ORFX

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RESULT 6
ABB79474
AID 79474
AID 7947
                                                                                       RESULT 7
AAW54351
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Best Local
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                  14-AUG-1998
                                             AAW54351;
                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                       The present sequence is replication start codon Orc4Lp (HsORC4L) 47.3.
                                                                                                                                                                                                                                                                                                                                                                                                                      Polypeptide-human replication start codon initiation recognition compound subunit Orc4Lp (HsORC4L)47.3 and polynucleotide for coding
                                                                      AAW54351 standard;
                                                                                                                                                                                                                                                                                                                                                                                   Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-JUN-2000;
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                                                                                                                                                                                                                      Local
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                                                                                                                                                              LKKVHEE 7
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DB; ABN84122.
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                                                                                                                                                                                                       6; Conservative
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6; Conserv
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               (first entry)
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85.7%;
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                                                                                                                                                                                                                                                                                                       the protein sequence of novel human initiation recognition compound subunit This protein and its coding sequence are of diseases such as cancer and HIV
                                                                         465
                                                                                                                                                                                                     Score 33; DB
Pred. No. 2.2e
1; Mismatches
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Pred. No. 1
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1.6e+02;
ches 0;
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                                                                                                                                                                                                                    .2e+02;
                                                                                                                                                                                                                                Length 430;
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Matches 6
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            Petersohn D,
                                                                   09-OCT-2000;
                                                                                                                             18-APR-2002.
                                                                                                                                                                                   Homo sapiens.
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                                                                                                                                                                                                                                                                                                                   ABB77394;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
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06-SEP-1996;
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can be detected using 2D gel electrophoresis comparison of cell lysates. The proteins can be used as biochemical markers to detect the phase of the endometrium and can be measured in body fluids, obviating the nead for endometrial biopsies.
                                      (HENK ) HENKEL KGAA.
                                                                                                                                                                                                                                                        Human; dermatological; skin stress; ageing; spondin 2; cathepsin
actin gamma 1; vimentin; fibroblast; skin; cosmetic; pharmaceutic
                                                                                                                                                                                                                                                                                                               Human vimentin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Proteins AAW54349-W54364 are examples of proteins produced in the endometrium during the hyperplasia, adenocarcinoma or proliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Biochemical markers of human endometrium - diagnosis of hyperplasia and adenocarcinoma
                                                                                                                                                                                                                                                                                                                                                                                                                          ABB77394 standard;
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2D gel electrophoresis; detection.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6; Conserv
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96GB-0018600.
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Foerster
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1; Mismatches
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2.4e+02;
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pharmaceutical
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RESULT 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to in vitro methods for the detection of skin stress and/or skin ageing in humans and animals based on the determination of spondin 2, cathepsin L, actin gamma 1 or vimentin fragments secreted by fibroblast from the skin under test. Use of the methods in a test for potential commetics and pharmaceuticals with an effect on these skin conditions and products containing vimentin fragments are also included. Products containing viments are effective in the regulation, especially maintenance, of skin
The invention relates to the human pollinosis associated gene 795 which exhibits significantly reduced expression in the T-cells of individuals with high cedar pollen-specific 1gE (immunoglobulin E) levels. The gene was isolated from T-cells from individuals allergic to cedar pollen using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      In vitro assays i of spondin 2, cat secreted by skin
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                                                                                  Pollinosis-associated gene 795 undergoing significantly in subjects with high cedar pollen-specific IgE levels, diagnosis of allergic diseases and screening drug candid
                                                                                                                                                                                  Nagasu T,
Obayashi I,
                                                                                                                                                                                                                                                                                                           02-NOV-2000
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                                                                                                                                                                                                                                                                                                                                                                                               IgE;
                                                                                                                                                                                                                                                                                                                                                                                                            Human;
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                                                                                                                                                                                                                                                                                 26-APR-2000;
                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                  detection;
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DB; AAC64226.
                                                                                                                                                                                                                                                                                                                                                                                n; pollinosis-associated gene 795; vimentin homologue;
immunoglobulin E; cedar pollen allergy; T-cell; reduced expression;
ction; diagnosia; drug screening; allergic disease.
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EISAI CO LTD.
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6; Conser
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theosin L, actin gamma 1
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                                                          73pp;
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Yoshida N, Ogawa K, Matsui K, Takah
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ageing includes determination and vimentin fragments
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Takahashi E;
                                                                                                useful
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RESULT 10
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                AAY92331-37 were isolated in a modified yeast two hybrid system INIK1 protein as "bait". These are known sequences which are NIK1 interacting proteins. The invention concerns purified complexes NIK1 protein and a NIK1 protein-interacting protein, where the interacting protein is chosen from TrkA, protein phosphatase lalgif-3-3epsilon, alpha-tropomyosin, vimentin, p0071, Ini-1, IP-1, IP-3, IP-4, or IP-5. NIK1 (also referred to as Nek2) is a human
                                                                                                                                                                                                                                                                New complex of a NLK1 protein and a NLK1 protein-interacting protein, useful for treating cancer, hyperproliferative disorder, neurodegenerative disorder, cardiomyopathies, viral infections and
                                                                                                                                                                                                   Example 1;
                                                                                                                                                                                                                                               metabolic disorders
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homologue of the Aspergillus
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6; Conserv
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neuroprotective; cardiant.
                                                                                                                                                                                                   Page 145-147; 172pp;
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  nidulans mitotic
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are N1K1
                                            ase lalpha,
IP-1, IP-2
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                                                                                                                                 The present invention provides an antibody which reacts with a cleavage product of vimentin but not with the intact protein. This can be used to detect apoptosis, which may then be used as an indicator of the progression of diseases such as systemic lupus erythematosus, autoimmune haemolytic anaemia, Basedow's disease and acquired immunodeficiency
                                                                                                                                                                                                                                                   New antibody reacting with a cleavage product of vimentin but not with the intact vimentin, useful for detecting apoptosis and the quantity of cleavage product of vimentin or as a reagent for immunohistochemical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Vimentin;
systemic l
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NIK1 is a serine/threonine-specific kinase and is thought to play a role in cell-cycle events leading to the onset of mitosis. The complexes, their derivatives and NIK1 or NIK1-IP protein and DNA sequences, etc. are useful for treating or preventing a disease or disorder involving aberrant levels of the complex or protein. Such disorders include cancer, hyperproliferative disorders, neurodegenerative disorders, cardiomyopathles, viral infections and metabolic disorders.
                                                                                                    Sequence
                                                                                                                                                                                                                Disclosure; Page 10-12; 23pp; English
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                                                                                                                                                                                                                                                                                                         WPI;
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                                                                                                                                                                                                                                                                                                                                                                                    07-JUL-1999;
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LKKLHEE 240
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6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              entry)
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85.7%;
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1; Mismatches
                                             Score 33; DB 22;
Pred. No. 2.4e+02;
1; M1smatches 0;
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. 2.4e+02;
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AAU87694
ID AAU8
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XX 115-1
PF 06-1
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PR 07-1
PR 07-1
PR 15-1
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RESULT 13
AAB95511
ID AAB95
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                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                          useful for stimulating an immune response in a patient and treating pancreatic cancer in a patient. A host cell that expresses these polynucleotides is useful for determining the presence of cancer in a patient. A composition comprising the polynucleotide, its encoded protein, or an antibody that binds to the protein may be used in the diagnosis, prevention and/or treatment of diseases, particularly pancreatic cancer. The sequences of the invention are also useful in pharmaceutical compositions, e.g. vaccines, for the diagnosis and treatment of pancreatic cancer. Such compositions may be useful for inhibiting the development of cancer in a patient, or as markers for the progression of cancer. The polynucleotide sequences may also be used as probes or primers for nucleic acid hybridisation assays.

ANDB7689-ANDB7694 represent human pancreatic tumour proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-AUG-2000;
30-JAN-2001;
15-MAY-2001;
  AAB95511 standard;
                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to the isolation of cDNA sequences (ABK44061-ABK44209) encoding human pancreatic tumour proteins. To polynucleotide sequences encoding human pancreatic tumour proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cancers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel polynucleotide encoding pancreatic tumour pharmaceutical compositions, e.g. vaccines, for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pyle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-AUG-2001; 2001WO-US24619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200212331-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; pancreatic development of can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human
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                                                                                                                                          234 LKKLHEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (CORI-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-FEB-2002
                                                                                                                                                                      1 LKKVHEE
                                                                                                                                                                                                                                                                              Local
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                                                                                                                                                                                                                                                 Similarity
6; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABK44209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORIXA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Page 165-167; 167pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ž
                                                                                                                                                                                                                                                                                                                                                            466 AA;
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2001US-291201P.
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                                                                                                                                          240
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kalos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tumour protein; immune response; pancreatic cancer;
ncer; cancer progression; cytostatic.
Protein; 475
                                                                                                                                                                                                                                                                           91.7%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
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                                                                                                                                                                                                                                                                        Score 33;
Pred. No.
                                                                                                                                                                                                                                                 Mismatches
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                                                                                                                                                                                                                                                                                                        DB 23;
                                                                                                                                                                                                                                              .4e+02;
les 0;
                                                                                                                                                                                                                                                                                                     Length 466;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       polypeptides, useful treating pancreatic
                                                                                                                                                                                                                                                 Indels
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RESULT 14
AAB94625
ID AAB94
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AC AAB94
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Creation of the specification. Where a primer set comprises: (a) an oligordr primer and an oligorucleotide comprises one of the 5602 nucleotide sequences defined in the specification. Where a primer set to the complementary strand of a polynucleotide which comprises one of the 5602 nucleotide comprises at least 15 nucleotides; or (b) a combination of an oligonucleotide comprising a sequence complementary to the complementary strand of a polynucleotide which comprises a 5'-end sequence and an oligonucleotide comprising a sequence complementary to a polynucleotide which comprises a 5'-end complementary to a polynucleotide comprises at least 15 nucleotides and the combination of the 5'-end sequence/3'-end sequence is selected from those defined in the specification. The primer sets can be used in antisense therapy and in the specification. The primer sets can be used in antisense therapy and compart chargy. The primer sets can be used in antisense therapy and the control of detection and/or diagnosis of the abnormality of the proteins encoded by the full-length cDNAs. The primers are also useful for the control of the full-length cDNAs. The primers are also thathing of the full-length cDNAs easily without any specialised methods. AAH03166 to AAH13628 and AAH13633 to AAH19742 represent human cDNA sequences; and AAH13628 and control of the present oligonucleotides, all of which are used in the exemplification of the present oligonucleotides, all of which are used in the exemplification.
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                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 6
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27-AUG-1999;
11-JAN-2000;
02-MAY-2000;
09-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Primer sets for synthesizing polynucleotides, particularly the 5602 full-length cDNAs defined in the specification, and for the detection and/or diagnosis of the abnormality of the proteins encoded by the full-length cDNAs -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ota
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     AAB94625;
                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 8; SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-318749/34.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-JUN-2001
                                                             AAB94625 standard; Protein; 541
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (HELI-) HELIX RES INST
                                                                                                                                                                                                        100
                                                                                                                                                                                                                                                                                                                  Local Similarity
les 6; Conserv
                                                                                                                                                                                                                                     1 LKKVHEE 7
                                                                                                                                                                                                     LKKLHEE 106
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sugiyama T,
                                                                                                                                                                                                                                                                                                                                                                                                                                  475
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99JP-0300253.
2000JP-0118776.
2000JP-0183767.
2000JP-0241899.
                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                  ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nishikawa T,
T, Wakamatsu
                                                                                                                                                                                                                                                                                                                                             91.7%;
85.7%;
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                                                                                                                                                                                                                                                                                                                                                Score 33; I
Pred. No. 2.
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1 A, Nagai K
                                                                                                                                                                                                                                                                                                                     Mismatches
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                                                                                                                                                                                                                                                                                                                                          DB 22;
2.4e+02;
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, Otsuki
                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                       Length 475;
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RESULT 15 AAM25417 ID AAM25 XX

AAM25417 standard; Protein; 545

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100

106

1 LKKVHEE LKKLHEE

Matches

Conservative

Indels

0

Gaps

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Cf full-length cDNAs defined in the specification. Where a primer set to the complementary strand of a polynucleotide which complementary ctrand of a polynucleotide which comprises one of the 5602 nucleotide sequences defined in the specification, where the colligonucleotide comprises at least 15 nucleotides; or (b) a combination cof an oligonucleotide comprises a treat 15 nucleotides; or (b) a combination complementary strand of a polynucleotide which comprises a 5'-end complementary to the comprises and an oligonucleotide comprising a sequence complementary to a complementary strand of a polynucleotide which comprises a 5'-end sequence of comprises a 5'-end sequence of comprises a 1'-end sequence, where the comprises a treat 15 nucleotides and the combination of the 5'-end sequence3'-end sequence is selected from those defined in comprises a treat to a polynucleotide which comprises and the combination of the specification. The primer sets can be used in antisense therapy and comprise therapy. The primers are useful for synthesising polynucleotides, particularly full-length cDNAs. The primers are also useful for the combination of the full-length cDNAs. The primers allow obtaining of the full-length cDNAs easily without any specialised methods. AAH03166 to AAH13628 and composed to the composition of t
                   Query Match
Best Local
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27-AUG-1999;
11-JAN-2000;
02-MAY-2000;
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Ishii S,
                                                                                                                            represent of the pre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Primer sets for synthesizing polynucleotides, particularly the 5602 full-length cDNAs defined in the specification, and for the detection and/or diagnosis of the abnormality of the proteins encoded by the full-length cDNAs -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-FEB-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention full-length cDNAs defi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 8; SEQ ID 15483; 2537pp +
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                                                                                  Sequence
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                                                                                                                            present
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, Sugiyama T, Wakama
                     Similarity
                                                                                  541
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2000JP-0118776:
2000JP-0183767:
2000JP-0241899:
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                                                                                  A
                                                                                                                              invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    detection; diagnosis; antisense therapy; gene therapy
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                     91.7%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          describes primer sets for synthesising
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Score 33; DB Pred. No. 2.7e

1; Mismatches
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A, Nagai K
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                                             DB 22;
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es 0;
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Otsuki
                                         Length 541;
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CC AAM2966 to AAH99904 encode the human proteins given in AAM25225 to CC AAM25963. The proteins can have activities based on the tissues and cc cells they are expressed in, such as: antiinflammatory; antirheumatic; CC entrat hervous system; virucide; antibacterial; endocrine; cardiant; CC central nervous system; virucide; antiapregant; haemostatic; unlinerary; CC antiulcer; osteopathic; dermatological; antiallergic; antiasthmatic; CC antiulcer; osteopathic; neuroprotective; antidepressant; nootropic; CC antidiabetic; cytostatic; neuroprotective; antidepressant; nootropic; CC antiparkinsonian; and immunostimulant. The proteins and polynucleotides CC encoding them can be used in gene therapy, antisense therapy and vaccine production. The proteins and polynucleotides are useful for screening for CC agonists or antagonists of a protein and for the treatment and diagnosis of disorders associated with the activity of a protein e.g. inflammation, CC rheumatold arthritis, septic shock, pancreatitis, cardiac dysfunction, neuropathology, cardiac anaphylaxis, viral, bacterial, HIV and fungal infections, platelet disorders, thrombocytopaenia, wounds, burns, ulcers, ulcers,
                                             neurological disorders.
                                                              anaemia, platelet disorders, thrombocytopaenia, wounds, burns, ulcers, osteoporosis, severe combined immunodeficiency, eczema, allergic rhinitis, asthma, diabetes, cancer, multiple sclerosis, depression, Alzheimer's disease, Parkinson's disease, neurodegenerative and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 20; Page 201; 1217pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tang YT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-DEC-1999; 99US-0471275.
21-JAN-2000; 2000US-0488725.
25-APR-2000; 2000US-0552317.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; cancer; ulcer; HIV infection; human immunodeficiency virus; antiinflammatory; antirheumatic; antiarthritic; immunosuppressive; antibacterial; endocrine; cardia; central nervous system; virucide; anti-HIV; fungicide; antimutagen; cardiovascular; antianemic; anamenia; antiangeregant; haemostatic; vulnerary; antiulcer; osteopathic; eczema; dermatological; antiallergic; antiasthmatic; antidabetic; cytostatic; neuroprotective; antidepressant; nootropic; antiparkinsonian; infection; immunostimulant; gene therapy; antisense therapy; vaccine; inflammation; antianaphylactic; rheumatoid arthritis; septic shock; pancreatitis; cardiac dysfunction; neuropathology; cardiac anaphylaxis; autoimmunity; genetic disease; haematopoietic disorder; platelet disorder; asthma; thrombocytopaenia; osteoporosis; severe combined immunodeficiency; allergic rhinitis; dispate; multiple solerosis; depression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Isolated human polynucleotides encoding polypeptides, useful for treatment and diagnosis of e.g. cancer, ulcers and HIV infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-457603/49.
N-PSDB; AAH99358.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-DEC-2000; 2000WO-US35017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-JUL-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alzheimer's disease; Parkinson's disease; neurodegenerative disorder
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Ouery Match

Best Local Similarity

Matches 6; Conserv

Conservative

1:

Score 33; DB 22; Pred. No. 2.8e+02; 1; Mismatches 0;

Length 545; Indels

0,

Gaps

0

91.7%; 85.7%;

Sequence

545 AA;

몋 Š 150 LKKLHEE 156 ب LKKVHEE 7

Search completed: November 13, 2002, 13:22:06 Job time: 36.7021 secs

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Title:
Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 200000000
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                                                                                                                                                                                                                                                                                                                                                                                                                             Score
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1: /cgn2_6/ptodata/1,
2: /cgn2_6/ptodata/1,
3: /cgn2_6/ptodata/1,
4: /cgn2_6/ptodata/1,
5: /cgn2_6/ptodata/1,
6: /cgn2_6/ptodata/1,
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/cgn2_6/ptodata/1/laa/5B_COMB.pep:*
/cgn2_6/ptodata/1/laa/6A_COMB.pep:*
/cgn2_6/ptodata/1/laa/6B_COMB.pep:*
/cgn2_6/ptodata/1/laa/6B_COMB.pep:*
/cgn2_6/ptodata/1/laa/backfiles1.pep:*
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US-08-323-170B-2
US-08-954-441-2
US-08-954-441-2
US-08-952-126-142
US-09-134-001C-5218
US-09-134-001C-5218
US-09-144-925-16
US-08-93-042-1
US-08-93-042-1
US-08-98-045-18
US-08-98-045-18
US-08-911-927-33
US-08-911-927-33
US-09-911-927-33
US-09-911-927-33
US-09-915-66018
US-08-965-762-33
US-08-464-342-2
US-08-466-663A-2
US-08-965-272-2
US-08-965-601-8
US-08-965-601-8
US-08-965-601-8
US-08-965-601-8
US-08-965-601-8
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(without alignments)
20.336 Million cell updates/sea
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Sequence 2, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 4, Appli
Sequence 4, Appli
Sequence 5218, Appli
Sequence 15, Appli
Sequence 16, Appli
Sequence 16, Appli
Sequence 18, Appli
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US-08-726-306A-183
Query Match
Best Local Similarity
Matches 7; Conserv
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GENERAL INFORMATION:
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                                                                         TOPOLOGY: u
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MEDIUM TYPE: Diskett
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COUNTRY: US
ZIP: 02111
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llarity 100.0%;
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E: peptide
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Result No.

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27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28
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56	56	56			56	7	984	984	619	582	535	394	390	308	289	280	154
N	N	N	N	N	N	4	4	4	4	4	N	4	4	4	4	4	4
US-08-867-087B-5	US-08-867-087B-4	US-08-485-981-4	US-08-485-981-3	US-08-323-449B-4	US-08-323-449B-3	US-09-172-045-4	US-08-980-115-15	US-08-764-870-15	US-09-134-001C-4248	US-09-419-459-2	US-08-007-107-2	US-09-419-459-10	US-09-419-459-4	US-09-071-035-26	US-09-071-035-28	US-09-264-419C-2	US-09-134-001C-4529
Sequence 5, Appl1	Sequence 4, Appli	Sequence 4, Appli	e ω,	e 4	ω	4, 7	15,	Sequence 15, Appl	Sequence 4248, Ap	Sequence 2, Appli	Sequence 2, Appl1	Sequence 10, Appl	e 4, 2	e 26,	e 28	e 2, App	Sequence 4529, Ap

ALIGNMENTS

PRIOR APPLICATION NUMBER: GB 95/20080.4 PRIOR APPLICATION NUMBER: GB 95/20080.4 FILING DATE: 02-Oct-1995 PRIOR APPLICATION NUMBER: US 60/009,832 FILING DATE: 01-Jan-1996 APPLICATION NUMBER: US 60/009,832 FILING DATE: 01-Jan-1996 ATTORNEY/AGENT INFORMATION: NAME: Williams, Ph.D., Kathleen M. REGISTRATION NUMBER: 34,380 REFERENCE/DOCKET NUMBER: 34,380 REFERENCE/DOCKET NUMBER: 96,048-A (3255/00784) TELEPHONE: (617) 345-9110 TELEPHONE: (617) 345-9111 INFORMATION FOR SEQ ID NO: 183: SEQUENCE CHARACTERISTICS: LENGTH: 160 amino acids TYPE: amino acid CTDANNERMERS: 410716 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WOTGPERFECT 6.1 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/726,30 FILING DATE: 02-Oct-1996 APPLICANT: van Leeuwen, Frederik Willem APPLICANT: Burbach, Johannes Peter Henri APPLICANT: Grosveld, Franklin G. TITLE OF INVENTION: DIAGNOSIS METHOD AND NUMBER OF SEQUENCES: 189 93, Application US/08726306A 5958684 E: Banner & Witcoff, Ltd. 1 Financial Center IBM PC compatible UMBER: US/08/726,306A 02-Oct-1996 1.44 Mb storage REAGENTS

Mismatches

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Gaps

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DB 2;

Length 160; Indels

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US-09-610-401-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2, Application US/08323170B Patent No. 5733772
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APPLICANT:
APPLICANT:
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SOFTWARE: Patentin V
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RIOR APPLICATION NUMBER: JP 11
RIOR FILING DATE: 1999-07-07
NMBER OF SEATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ENGTH:
                                                       CLASSIFICATION: 424
CLASSIFICATION DATA:
PRIOR APPLICATION NUMBER: US 08/010,409
APPLICATION NUMBER: US 08/010,409
FILING DATE: 29-JAN-1993
ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                             SOFTWARE: Patentin Rel
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
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ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, 8th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LE REFERENCE:
NAME: Quine, Jonathan A.
REGISTRATION NUMBER: P-41,261
REFERENCE/DOCKET NUMBER: 015280-113100US
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NERAL INFORMATION:
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                                                                                                                                                                                                                                MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                           APPLICATION NUMBER: 13-OCT
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VENTION: Antibody against cleavage product of vimentin
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NAKANISHI, Keiko,
                                                                                                                                                                                                                                                                                                                                           California
                                                                                                                                                                                                                                                                                                                         USA
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Kaslow, David C.
                                                                                                                                                             13-OCT-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     91.7%;
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Pred. No. 69;
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                                                                                                                                                                                         INFORMATION FOR SEQ ID NO:
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                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 3135 amino aci
                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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 2555
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APPLICATION NUMBER: US OF
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                                                                                                                        MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FITLE OF INVENTION:
FITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 13-003
                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                   Local Similarity
les 5; Conserv
                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                    TELEPHONE:
                                                                                                                                                                                                                                                 REGISTRATION NUMBER: 38,4
                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/0 FILING DATE: 20-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 94111-3834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 LKKVHEE 7
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                        1 LKKVHEE 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              amino
                                                                                                                                                 amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E: Townsend and Townsend and Crew LLP Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3135 amino acids
                                                                                                                                                                3135 amino acids
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                                                     Conservative
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                                                                                                                                                                                                                                                                         Gregory P
                                                                                                                                                                                                         576-0300
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                                                                   91.78;
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                                                                   Score 33;
Pred. No.
                                                                                                                                                                                                                                                 015280-113110US
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Pred. No. 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Expression of Plasmodium Transmission-Blocking Target Antigen, Pfs230
                                                                                                                                                                                                                                                                                                                                                                                                                                           Version #1.30
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                                                                                 DB 4;
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US-08-592-126-142
                                                                                                                                                                                                     GENERAL INFORMATION:
             SOFTWARE:
                                                                                                                                                                                                                                 Sequence 4, Application US/09610401
                                                                                                                                                                                                                                                                                                                                                                              Matches
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                                                                                                                                                                                                                      Patent No. 6417336
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                                                          CURRENT APPLICATION NUMBER: US/09/610,401
CURRENT FILLING DATE: 2000-07-05
PRIOR APPLICATION NUMBER: JP 11-193235
PRIOR FILING DATE: 1999-07-07
                                            NUMBER OF SEQ ID NOS:
                                                                                                                                                      APPLICANT:
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APPLICANT: Gregor
                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: (415) 324-0960 INFORMATION FOR SEQ ID NO:
                                                                                                                    PPLICANT: SHIBATA, Takehiko
ITLE OF INVENTION: Antibody against cleavage product of vimentin
ILE REFERENCE: 522.1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 46
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE:
HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 420 amino acids
TYPE: Amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ANTI-SENSE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                 373 LKRVHQE 379
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Sholtz, Charles REGISTRATION NUMBER: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                  1 LKKVHEE 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
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466
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                             PatentIn
                                                                                                                                                                   MORISHIMA, No. 6417336uhiro, NAKANISHI, Keiko,
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71.4%;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                             DB 2;
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CURRENT APPLICATION NUMBER: US/09/134,001C
CURRENT FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR FILING DATE: 1997-11-08
PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR FILING DATE: 1997-08-14
PRIOR FILING DATE: 1997-08-14
SEQ ID NO 5218
LENGTH: 804
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/1.
CURRENT FILING DATE: 1998-09-09
EARLIER APPLICATION NUMBER: 08/892,
EARLIER FILING DATE: 1997-07-11
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PERL Program
SEQ ID NO 4
LENGTH: 746
TYPE: PRT
ORGANISM: Caenorhabditis elegans
                                                                   ; ORGANISM: Staphylococcus epidermidis US-09-134-001C-5218
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                                Query Match
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Best Local S
                                                                                                                                                                                                                                                                APPLICANT: Lynn Doucette-Stamm et al TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCC TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS FILE REFERENCE; GTC-007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Guegler, Karl J. APPLICANT: Corley, Neil C. APPLICANT: Shah, Purvi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Shah, Purvi
TITLE OF INVENTION: ATP-DEPENDENT RNA HELICASE PROTEIN
FILE REFERENCE: PF-0338-1 DIV
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 / Match 83.3%;
Local Similarity 85.7%;
nes 6; Conservative
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wes 5; Conserv
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; Score 30; DB; Pred. No. 3.9e
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Pred. No.
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Pred. No.
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3.7e+02;
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                   .9e+02;
                                Length 804;
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Gaps
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RESULT 9
US-08-893-042-1
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                                                                                                                                          RESULT 10
US-08-685-992-16
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                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                    Patent No. 5912138 GENERAL INFORMATION:
                                                                                                                                                                                                                                                Matches
                                                                                                                              Sequence 16,
                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 415-845-4166
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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                         CORRESPONDENCE ADDRESS:
                                                                        APPLICANT: Tonks,
APPLICANT: Flint,
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FILING DATE: Herewith
PRIOR APPLICATION DATA:
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CURRENT APPLICATION DATA:
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                                                   ITLE OF INVENTION:
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                                                                                                                                                                                             70 LKKHHEE 76
                                                                                                                                                                                                                                               Local Similarity 85.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0134 US
                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS:
              ADDRESSEE:
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                                                                                                                   59121
                                                                                                                                                                                                                                                                                                                                                                                         amino acid
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                                                                                                                             Application US/08685992
E: HAMILTON, BROOK, SMITH & REYNOLDS, P.C. Two Militia Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3174 Porter Drive
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                                                                                                                                                                                                                                                                                                                                                                                                                                            415-845-4166
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JENTION: NOVEL ATPASE INHIBITOR
                                                                                      Tonks, Nicholas
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                                                                            Andrew
                                                   SUBSTRATE TRAPPING PROTEIN TYROSINE PHOSPHATASES
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Pred. No.
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RESULT 11
US-09-144-925-16
; Sequence 16, Application US/09144925
""+=nt No. 5951979
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Best Local Similarity
Fig. 7-4-hes 5; Conserve
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TOPOLOGY: linear;
MOLECULE TYPE: peptide
US-08-685-992-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                              COUNTRY: USA
ZIP: 02421-4799
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                          ATTORNEY/AGENT INFORMATION:
                                                                                                                                    COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows 95
SOFTWARE: Fast-SEQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 255 amino acid
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 781-861-6240
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                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: 01
FILING DATE: July 25,
                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: HAMILTON,
                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                             ITLE OF INVENTION:
                                                                                         APPLICATION NUMBER: FILING DATE: CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08 FILING DATE: 25-JUL-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Granahan, Patricia REGISTRATION NUMBER: 32,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OPERATING SYSTEM:
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REGISTRATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Windows 95
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                                                             08/685,992
                                                                                                                          US/09/144,925
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Pred. No. 2
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                                                                                                          ; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-07-730-953-2
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US-07-730-953-2
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                                               Matches
                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 255 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                    TELEFAX: (202)638-4810
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 400 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            quence 2, Application US/07730953
tent No. 5288614
                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/730,953
FILING DATE: 19910723
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UMBER: DE P 39 42 999.7
FILING DATE: 21-DEC-1989
ATTORNEY/AGENT INFORMATION:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 781-861-6240
                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 2 CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TILE OF INVENTION: METHOD FOR THE DETECTION OF MALIGNANT ITLE OF INVENTION: DISEASES
                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: P5
                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: U.S.A. ZIP: 20005-5701
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                                             Local Similarity
les 6; Conserv
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1 LKKVHEE 7
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                                                                                                                                                                    400 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BODENMULLER, Heinz
DESSAUER, Andreas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781-861-9540
                                                                                                                                                                                                                       (202)638-4810
                                             Conservative
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                                                            Score 29;
Pred. No.
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Pred. No.
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                                                               .2e+02;
                                             1; Indels
                                                                            Length 400;
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US-08-989-045-18
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                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: 1 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                            tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tent No.
                                                                                                APPLICANT: KEESEE, SUSAN
APPLICANT: OBAR, ROBERT
APPLICANT: OWNER-TOWN OF THE TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR THE TITLE OF INVENTION: DETECTION OF CERVICAL CANCER NUMBER OF SEQUENCES: 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: GREENHALGH, DUNCAN A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
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TITLE OF INVENTION: DE
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: KEESEE, SUSAN
APPLICANT: OBAR, ROBERT
APPLICANT: WU, YING-JYE
                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: Testa, Hu
STREET: 125 High St.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                       218 LKKNHEE 224
STATE: MA
COUNTRY: USA
ZIP: 02110
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity es 6; Conserv
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TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: GREENHALGH, DU
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: USA
ZIP: 02110
                               STATE:
                                              CITY: Boston
                                                                                                                                                                                                                                                                                                                                           1 LKKVHEE 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: MTP-023 (8395/27)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DDRESSEE:
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                                                                                                                                                                                                                             3, Application US/08989045
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5858683
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125 High St.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                248-7000
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                                                                              Hurwitz & Thibeault
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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Sequence 4, Applicate
Sequence 1, Applicate
GENERAL INFORMATION:
GENERAL INFORMATION:
FOR SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Schering Corp.
STREET: 1 Girald Farms
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; TOPOLOGY: lin
; MOLECULE TYPE:
US-08-989-045-18
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PCT-US94-00198-4
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Best Local Similarity 85.7%;
Matches 6; Conservative
                                                                                            CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/004,824
FILING DATE: 15-JAN-1993
ATTORNEY/AGENT INFORMATION:
NAME: Lunn, Paul G.
REGISTRATION NUMBER: 32,743
REFERENCE/DOCKET NUMBER: DX0352 PCT
TELEPHONE: (201)822-7255
TELEPHONE: (201)822-7039
                                                           TELEFAX: (201)822-7039
[NFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 38,678
REFERENCE/DOCKET NUMBER: MTP-023 (8395/27).
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
TELEFAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 18:
SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM: 6.0.8
SOFTWARE: Microsoft Word 5.1a
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDLIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: GREENHALGH, DUNCAN A
REGISTRATION NUMBER: 38,67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        218 LKKNHEE 224
LENGTH: 3079 amino acids
TYPE: amino acid
STRANDENES: single
                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: PCT/US94/00198
                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER:
                                                                                                                                                                                                                                                                                                         FILING DATE:
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Pred. No. 3.5e+02;
0; Mismatches 1
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                                                                                        Query Match
Best Local Similarity
"~+~hes 5; Conserve
Search completed: November 13, 2002, 13:18:05
Job time: 11.1277 secs
                                                     밁
                                                                                                                                                       ; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: Saccharomy
PCT-US94-00198-4
                                                   1:|:|||
3019 LEKLHEE 3025
                                                                            1 LKKVHEE 7
                                                                                                      Conservative
                                                                                                                                                                   Saccharomyces cerevisiae
                                                                                                                  80.6%;
71.4%;
                                                                                                      <u>ب</u>
                                                                                                                Score 29;
Pred. No.
                                                                                                      Mismatches
                                                                                                   DB 5; Length 3079;
1.9e+03;
ches 0; Indels
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Result
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                        Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               length: 0
length: 2000000000
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Match
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Gapop 10.0 , Gapext 0.5
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22.121 Million cell updates/sec
 Published_Applications_AA: *
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; /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
; /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
; /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*
; /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
; /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*
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/cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
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/ptodata/2/pubpaa/US08_NEW_PUB.pep:*
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          US-09-923-779-155
US-09-881-752A-206
US-09-864-761-39889
US-09-764-898-281
US-10-152-647-61-42664
US-09-935-145-5
US-09-935-145-5
US-09-974-216-1
US-09-974-216-1
US-09-918-626-17
US-09-918-626-17
US-09-919-172-9
US-09-919-172-31
US-09-919-172-31
US-09-919-172-31
US-09-925-300-1381
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39889, A
                                     5, Appli
17, Appl
1115, Ap
9, Appli
31, Appl
                                                                                                            281, App
4, Appli
42664, A
5, Appli
1, Appli
1, Appli
1456, Ap
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3, Appli
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-738		-764-847-9	-761-3	-761-4	-864-7	-001-	-09-815-242-1221	-09-815-242-1211	-09-815-24	-09-815-242-1236	-09-815-242	-09-975-901-	-10-074-527-	-09-815-242-5	6-5	-09-779-307-1	-09-779-307-	-09-779-307-	674-	586-	US-09-909-088B-325	US-09-909-320-325	91A-	-09-925-299-	761-
e 10, A	Sequence 1529, Ap	.7	Sequence 35183, A	e A		ppl	е Н	e 12111,	'n	æ	e 56:	Sequence 2, Appli	e 2,	e 58:	e 33		e 21	Sequence 20, Appl	e 140	e 30,	e 329	e 325		Sequence 992, App	Sequence 34684, A

ALIGNMENTS

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RESULT 2
US-10-152-647-3
(Sequence 3, Application US/10152647
; Patent NO. US20020137110A1
; Patent NO. US20020137110A1
; GENERAL INFORMATION:
APPLICANT: MORISHIMA, NO. US20020137110A1uhiro,
APPLICANT: NAKANISHI, Kelko,
APPLICANT: SHIBATA, Takehiko
; TITLE OF INVENTION: Antibody against cleavage product of vimentin
; FILE REFERENCE: 522.1004
; CURRENT APPLICATION NUMBER: US/10/152,647
; CURRENT APPLICATION NUMBER: US/10/152,647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; NUMBER OF SEQ ID NOS: 155
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 155
; LENGTH: 466
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-923-779-155
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US-09-923-779-155
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APPLICANT: Pyle, ruth A.
APPLICANT: Yu. Jiangchun
APPLICANT: Kalos, Michael D.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF PANCREATIC CANCER
FILE REFERENCE: 210121.553
                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match

Best Local Similarity

Matches 6; Conserv
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CURRENT FILING DATE: 2001-08-06
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Pred. No. 19;
1; Mismatches
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; ORGANISM: Helicobacter pylori
US-09-881-752A-206
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-152-647-3
                                                                                                                                                                                                                                                                   US-09-864-7<u>61-39889</u>
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                                                                                                                                                                                                                                      Sequence 39889, Application US/09864761 Patent No. US20020048763A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: US 08/833,457
PRIOR FILING DATE: 1997-04-01
NUMBER OF SEQ ID NOS: 370
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 206
LENGTH: 400
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Best Local
        APPLICANT: Hanzel, David K.

APPLICANT: Chen, Wensheng

TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY

FILE REFERENCE: Acomica-X-1

CURRENT APPLICATION NUMBER: US/09/864,761

CURRENT FILING DATE: 2001-05-23

PRIOR APPLICATION NUMBER: US 60/180,312

PRIOR APPLICATION NUMBER: US 60/207,456

PRIOR FILING DATE: 2000-05-26

PRIOR FILING DATE: 2000-05-26

PRIOR FILING DATE: 2000-05-26

PRIOR FILING DATE: 2000-05-26
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APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K
APPLICANT: Chen, Wensheng
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Kleanthous, Harold APPLICANT: Al-Garawi, Amal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: US/09/610,401
PRIOR FILING DATE: 2000-07-05
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85.7%;
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Pred. No. 26;
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Pred. No.
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19;
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US-09-764-898-281; Sequence 281, Application US/09764898; Patent No. US20020090673A1; GENERAL INFORMATION:
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Best Local Similarity
Watches 5; Conserv
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                                                               APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PJZ01
Prior application data re
NUMBER OF SEQ ID NOS: 311
                                 CURRENT APPLICATION NUMBER: US/09/764,898
CURRENT FILING DATE: 2001-01-17
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PRIOR APPLICATION NUMBER: US
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TYPE: PRT
ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                     1 LKKVHEE 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 2000-09-21
APPLICATION NUMBER: US 09/608,408
FILING DATE: 2000-06-30
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                                                                                                                                                                                                                                                     LKRVHQE 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATION NUMBER: PCT/US01/00668
                                                                                                                                                                                                                                                                                                                        Conservative
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EXPRESSED IN HELA
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71.4%;
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D IN ADULT LIVER, SIGNAL = 3.7
D IN HEARY, SIGNAL = 3.2
D IN LUNG, SIGNAL = 4
D IN FETAL LIVER, SIGNAL = 3.4
D IN BONE MARROW, SIGNAL = 3.5
D IN BONE MARROW, SIGNAL = 3.5
THIT: 092599, EVALUE 2.00e-19
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                                                                                                                                                                                                                                                                                                                      Score 30; DB 10; Length 64;
Pred. No. 9.4;
2; Mismatches 0; Indels
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                  consult PALM or file wrapper
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; NAME/KEY: SITE
; LOCATION: (318)
; OTHER INFORMATION: Xaa equals an information: (319)
; LOCATION: (329)
; OTHER INFORMATION: Xaa equals an US-09-764-898-281
                                           US-09-864-761-42664

; Sequence 42664, Application US/09864761

; Patent No. US20020048763A1

; GENERAL INFORMATION:
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US-10-152-647-4
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US-10-152-647-4
                                                                                                                                                                                                                                                                                                          ; PRIOR APPLICATION NUMBER: US/09/610,401; PRIOR FILING DATE: 2002-05-21; PRIOR FILING DATE: 2000-07-05
NUMBER OF SEQ ID NOS: 4
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 4
LENGTH. 15
                                                                                                                                                                                                    Query Match
Best Local S
Matches 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 4, Application US Patent No. US20020137110A1
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APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
                                                                                                                                                                                                                                                                                         TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: 522.1004
CURRENT APPLICATION NUMBER: US/10/152,647
CURRENT FILING DATE: 2002-05-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: SITE
LOCATION: (299)
OTHER INFORMATION:
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NAME/KEY: SITE
LOCATION: (126)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
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LOCATION: (168)
OTHER INFORMATION: Xaa
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                                                                                                                                                                                                                                                                                                                                                                                                                                 ITLE OF INVENTION: Antibody against cleavage product of vimentin
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269 LKRVHQE 275
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                                                                                                                                                                                                      Local Similarity
nes 5; Conserv
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Local Similarity 71.4%;
1es 5; Conservative
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                                                                                                                                                                                                      Conservative
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Pred. No.
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SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 42664
LENGTH: 39
                                                                                 Query Match
Best Local Similarity
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OTHER INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: US 60/207,456 PRIOR FILING DATE: 2000-05-26
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CURRENT FILING DATE: 2001-05-23
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                                                                                                                                                                                                                                                                                                          OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo sapiens
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15 MQKIHEE 21
                   1 LKKVHEE 7.
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                                                                                                                                                    INFORMATION:
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                                                                   Conservative
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WMBER: US 09/608,
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                                                                                                                                                IN HELA, SIGNAL = 0.7
HIT: AA233606.1, EVALUE 3.00e-15
HIT: Q60610, EVALUE 3.00e-16
                                                                                                                                                                                                  IN PLACENTA, SIGNAL = 0.7
IN HBL100, SIGNAL = 0.86
IN BT474, SIGNAL = 0.65
                                                                                                                                                                                                                                                   IN FETAL LIVER, SIGNAL -
IN LUNG, SIGNAL - 0.7
IN ADULT LIVER, SIGNAL -
IN BRAIN, SIGNAL - 1.7
                                                                                 Score 29; [
Pred. No. 8.
                                                                 Mismatches
                                                                               3.8;
                                                                                                 10;
                                                                                               Length 39,
                                                                 Indels
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RESULT 8 US-09-935-145-5 β Q

Best Local Similarity 85.7 Matches 6; Conservative

85.78;

Pred. No. 25; 0; Mismatches

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US-09-273-135-1
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; ORGANISM: Homo Sapiens
US-09-935-145-5
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Best Local Similarity bo.,
Conservative
 Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: Compositions and methods for inhibiting anglogenesis FILE REFERENCE: Sequence Listing-09/935,145 CURRENT APPLICATION NUMBER: US/09/935,145 CURRENT FILING DATE: 2001-08-22 PRIOR APPLICATION NUMBER: 60/227,152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIn Ver.
EQ ID NO 5
LENGTH: 81
                                                                                                                                                                                        TELEFAX: 415-845-4166
NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE:
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                                                                            TOPOLOGY: linear MOLECULE TYPE: pep IMMEDIATE SOURCE:
                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: FastSEQ Version 1.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                               TTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
                                                             LIBRARY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        45 LKKHHEE 51
                                                                                                                       STRANDEDNESS:
                                                                                                                                                                                                                         TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                  OPERATING SYSTEM:
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                                                                                                                                                          ENGTH:
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                                                                                                                                                                                                                                                                                                                                   OR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                      LING DATE:
                                                                                                                                                                                                                                                       ERENCE/DOCKET NUMBER:
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                                                                                                                                         amino acid
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IS20020091081A1
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                                                                                                                                                            106 amino acids
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ENTION: NOVEL ATPASE INHIBITOR
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85.7%;
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Score 29;
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Pred. No. 19;
DB 10;
Length 106;
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CLONE: Consensus
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SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-974-216-1
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US-09-925-301-1456
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US-09-974-216-1
                                                                                   GENERAL
                                                                                                   Sequence 1456, Application US/09925301 Patent No. US20020052308A1
                                                                                                                                                                                                                                                                         Matches
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Best Local
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CURRENT APPLICATION NUMBER: US/09/925,301
CURRENT FILING DATE: 2001-08-10
                              FILE REFERENCE: PA106
                                                 TITLE OF INVENTION:
                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 415-845-4166 INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                       70 LKKHHEE 76
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REGISTRATION NUMBER: 36,7
REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                               IMMEDIATE SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 94304
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Hillman, Jennifer L.
TITLE OF INVENTION: NOVEL ATPASE INHIBITOR
                                                                                  INFORMATION
                                                                                                                                                                                                                                                                       Similarity 6; Conserv
                                                                Rosen et al
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                             LIBRARY: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 09/273,135 FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/09/974,216 FILING DATE: 09-Oct-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 1.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/09974216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                             OPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: U.S.
                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3174
                                                Nucleic Acids, Proteins and Antibodies
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                                                                                                                                                                                                                                                                                         80.6%;
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                                                                                                                                                                                                                                                                       Score 29; DB Pred. No. 25; 0; Mismatches
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                                                                                                                                                                                                                                                                                                        10; Length 106;
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APPLICATION NUMBER: PCT/US00/05882 FILING DATE: 2000-03-08

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RESULT 13
US-09-788-626-17
; Sequence 17, Application US/09788626
; Patent No. US20020009762A1
; GENERAL INFORMATION:
; APPLICANT: Filnt, Andrew J.
; APPLICANT: COOl, Deborah E.
; APPLICANT: COOL, DEBORATE ASSAY FO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: MEYORS, RACHEL A.

APPLICANT: MEYORS, RACHEL A.

TITLE OF INVENTION: 38692 AND 21117, NOVEL DUR

TITLE OF INVENTION: PHOSPHATASE MOLECULES AND

FILE REFERENCE: 10448-030002

CURRENT APPLICATION NUMBER: US/09/816,494

CURRENT FILING DATE: 2001-03-23

PRIOR APPLICATION NUMBER: US 60/191,858

PRIOR APPLICATION NUMBER: US 60/191,858

PRIOR APPLICATION NUMBER: 05 07191,858

PRIOR APPLICATION NUMBER: US 60/191,858

PRIOR FILING DATE: 2000-03-24

NUMBER OF SEQ ID NOS: 10

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 5

LENGTH: 223

TYPE: PRT

ORGANISM: Homo sapiens

US-09-816-494-5
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Best Local Similarity
""" 6; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                       Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 1456
                                                   TITLE OF INVENTION: IMPROVED ASSAY FOR PROTEIN TYROSINE TITLE OF INVENTION: PHOSPHAYES FILE REFERENCE: 200125-401 CURRENT APPLICATION NUMBER: US/09/788,626 CURRENT FILING DATE: 2001-02-13
NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
EQ ID NO 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/PRIOR FILING DATE: 1999-03-12
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ORGANISM: Homo saplens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
NAME/KEY: SITE
LOCATION: (131)
OTHER INFORMATION: Xaa equals any
NAME/KEY: SITE
LOCATION: (137)
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                                                                                                                                                                                                                                                                                                                              202 LKRTHEE 208
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                 FastSEQ for Windows Version 4.0
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Pred. No. 54;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
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US-09-919-172-9
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; Sequence 1115, Application US/09922217
; Patent No. US20020076414A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1115
LENGTH: 400
TYPE: PRT
                                                                                                   SOFTWARE: PERL
SEQ ID NO 9
                                                                                                                                                                                                                                                                                                                                     Sequence 9, Application US/09919172
patent No. US20020119463A1
GENERAL INFORMATION:
APPLICANT: Faris, Mary
APPLICANT: Turner, Christopher M.
TITLE OF INVENTION: PROSTATE CANCER MARKERS
FILE REFERENCE: PA.0036 US
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Best Local 9
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Patent
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                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/919,172
CURRENT FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/222,469
PRIOR FILING DATE: 2000-07-28
NUMBER OF SEQ ID NOS: 102
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TYPE: PRT ORGANISM:
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TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
FILE REFERENCE: 210121.471C13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT
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                                                                   LENGTH: 432
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hes 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31 LKPIHEE 37
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   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Jiang, Yuqiu
Smith, Carole Lynn
King, Gordon E.
Wang, Aijun
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Benson, Darin R.
Meagher, Madeleine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stolk, John A. Wang, Tongtong
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Pred. No.
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; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. US20020119463A1 1454852CD1
US-09-919-172-9

Query Match
Best Local Similarity 85.7%; Pred. No. 1.1e+02;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 LKKVHEE 7
|| | | | | |
Db 218 LKKNHEE 224

Search completed: November 13, 2002, 13:40:17

Job time: 4.90881 secs
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Result
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Title:
Perfect score:
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l: /cgn2_6/ptodata/1/paa/PCTUS_COMB.pep:*
cgn2_6/ptodata/1/paa/US06_COMB.pep:*
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/cgn2_6/ptodata/1/paa/US099_COMB.pep:
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2_6/ptodata/1/paa/US088_COMB.pep:
US-09-791-537-94919

US-10-108-260A-4090

US-09-791-537-32570

US-09-791-537-94920

US-09-791-537-94921

US-09-791-537-73564
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4090, Ap
32570, A
94920, A
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equen	1 US-09-791-537-8698	70	80.	36
equen	1 US-09-791-537-869	70	8	36
equenc	1 US-09-791-537-8697	70	8	36
equenc	1 US-09-791-537-6517	70	8	36
equenc	1 US-09-791-537-6210	70	8	36
equenc	1 US-09-791-537-4696	70	8	36
9	7 US-60-412-418-21	69	8	36
g	7 US-60-389-987-21	69	8	36
equen	1 US-09-791-537-13	69	8	36
equenc	1 US-09-791-537-7356	69	8	36
equenc	1 US-09-791-537-6236	69	8	36
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ALIGNMENTS

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NUMBER OF SEQ ID NOS: 153055
SOFTWARE: PatentIn version 3.0
SEQ ID NO 94919
LENGTH: 448
TYPE: PRT
ORGANISM: Gallus gallus
US-09-791-537-94919
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GENERAL INFORMATION:
APPLICANT: Bionomix, Inc.
                                                                  Query Match
Best Local Similarity
Matches 7; Conserv
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APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/791,537 CURRENT FILING DATE: 2001-02-22
 222 LKKVHEE 228
                                 1 LKKVHEE 7
                                                                  100.0%;
illarity 100.0%;
Conservative 0,
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Pred. No. 3.2e+02;
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; TYPE: PRT
; ORGANISM: Scyliorhinus stellaris
US-09-791-537-32570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Homo sapiens
US-10-108-260A-4090
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Best Local S
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APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210 NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
CURRENT FILING DATE: 2001-02-22
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CURRENT FILING DATE: 2002-03-27
NUMBER OF SEQ ID NOS: 5458
SOFTWARE: PATENTIN Ver. 2.1
EQ ID NO 4090
LENCTH: 450
TYPE: PRT
                                                        SOFTWARE: PatentIn version 3.0 EQ ID NO 94920
                                                                                            NUMBER OF SEQ ID NOS: 153055
                                                                                                                CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
                                                                                                                                                 APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
                                                                                                                                                                                                                            APPLICANT: Bionomix, Inc.
APPLICANT: Debe, Derek
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)RGANISM: Bos taurus
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                                                                                                                                                                                                                                                                                                                                                                             223 LKKVHEE 229
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7; Conserv
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RESULT 7
US-09-538-092-948
Sequence 948, Application US/09538092
GENERAL INFORMATION:
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US-09-791-537-73564
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US-09-791-537-94921
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SOFTWARE: PatentIn version
SEQ ID NO 94921
                                                                                                                                                               Query Match
Best Local 9
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CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
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CURRENT FILING DATE: 2001-02-22
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                                                                                                                                                                                                                                                                                                                                            APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY |
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
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APPLICANT: Denzer, Joseph
TITLE OF INVENTION: METHODS OF USE THEREOF
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                                                                                                                                                                                                                                           LENGTH: 463
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ENGTH: 462
                                                                                          230 LKKVHEE 236
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Pred. No.
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PRIOR APPLICATION NUMBER: 60/127,352
PRIOR FILING DATE: 1999-04-01
PRIOR APPLICATION NUMBER: 60/178,965
PRIOR ETLING DATE: 2000-02-01
PRIOR FILING DATE: 2000-02-01
NUMBER OF SEQ ID NOS: 1387
SOFTWARE: CURAPATSEQFORMATTER Version 0.9
SEQ ID NO 948
LENGTH: 469
TYPE: PRT
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US-09-791-537-62363
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US-09-791-537-62363
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Best Local Similarity 100
Matches 7; Conservative
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                                                                                                                                                                             GENERAL INFORMATION:
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                                                       APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: Patentin version 3.0
IEQ ID NO 62363
LENGTH: 469
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APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
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CURRENT FILING DATE: 2000-03-29
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
                                                                                                                                                            APPLICANT: Bionomix, Inc.
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LOCATION: (0)...(0)
OTHER INFORMATION: Polypeptide Accession Number P17661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ITLE OF INVENTION: Protein-Protein Complexes ILE REFERENCE: 15966-542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens
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mes 7; Conserv
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Pred. No. 3.4e+02;
D; Mismatches 0;
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                                                                                 ; ORGANISM: Homo sapiens US-60-389-987-213
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Query Match
Best Local Similarity
"hes 7; Conserv
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SOFTWARE: PatentIn version 3.0
SEQ ID NO 132613
LENGTH: 469
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Best Local Similarity 100.0%;
Matches 7; Conservative 0
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SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 213
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Best Local Similarity
Matches 7; Conser
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TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 561/210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
                                                                                                                                                                                                      CURRENT FILING DATE: 2002-
                                                                                                                                                                                                                                                        APPLICANT: Zhang, Bing
APPLICANT: Gibson, Bradford W.
APPLICANT: Taylor, Steven W.
APPLICANT: Glenn, Gary M.
APPLICANT: Glenn, Gary M.
APPLICANT: Warnock, Dale E.
TITLE OF INVENTION: IDENTIFIED IN THE MITOCHONDRIAL PROTEOME
TITLE OF INVENTION: IDENTIFIED IN THE MITOCHONDRIAL PROTEOME
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SEQ ID NO 73566
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APPLICANT: Fahy, Eoin D.
APPLICANT: Zhang, Bing
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                                                                                                                    LENGTH: 469
TYPE: PRT
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2002-06-17
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Pred. No. 3
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Pred. No. 3.4e+02;
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RESULT 12 US-60-412-418-213

Sequence 213, Application US/60412418

ENERAL INFORMATION:

APPLICANT: Ghosh, Soumitra S. APPLICANT: Fahy, Eoin D.

Zhang, Bing

CURRENT FILING DATE: 2002-C

UMBER: US/60/412,418 2002-09-20

FILE REFERENCE: 660088.465P3

PLICANT: Glenn, Gary M.
PPLICANT: Warnock, Dale E.
ITLE OF INVENTION: TARGETS FOR THERAPEUTIC INTERVENTION
ITLE OF INVENTION: IDENTIFIED IN THE MITOCHONDRIAL PROTEOME

Gibson, Bradford W. Taylor, Steven W. Glenn, Gary M.

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CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: Patentin version 3.0
SEQ ID NO 46962
LENGTH: 470
TYPE: PRT
ORGANISM: Bos taurus
US-09-791-537-46962
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                                                          RESULT 14
US-09-791-537-62106
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US-09-791-537-46962
Sequence 46962, Application US/09791537
GENERAL INFORMATION:
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SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 213
LENGTH: 469
TYPE: PAT
ORGANISM: Homo Sapiens
US-60-412-418-213
                              Sequence 62106, Appl GENERAL INFORMATION:
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Best Local Similarity 100
Matches 7; Conservative
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ITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBI
ITLE OF INVENTION: METHODS OF USE THEREOF
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239 LKKVHEE 245
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Local Similarity 100.0%;
nes 7; Conservative 0
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Debe, Derek
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                                           Application US/09791537
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Search completed: November 13, 2002, 13:39:15 Job time: 142.447 secs

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US-09-791-537-65178
                                                                Best Local Similarity Matches 7; Conserv
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Best Local
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LENGTH: 470
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Best Local Similarity 100.0%;
Matches 7; Conservative (
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SOFTWARE: PATENTIN VERSION 3.0
EQ ID NO 65178
LENGTH: 470
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CURRENT FILING DATE: 2001-02-22
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CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: .2001-02-22
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TITLE OF INVENTION: METHODS OF USE THEREOF.

ITLE OF INVENTION: METHODS OF USE THEREOF.
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ITLE OF INVENTION: THREE
ITLE OF INVENTION: METHO
239 LKKVHEE 245
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3: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep:*

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5: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep:*

6: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep:*

7: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep:*
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       41632 seqs, 11897606 residues
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Copyright (c) 1993 - 2002 Compugen
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 US-09-856-086-2
US-09-513-999C-7614
US-10-264-237-186
US-09-513-999C-5468
US-10-126-31-23
US-10-141-531-23
US-10-141-531-65
US-10-141-531-103
US-10-141-531-112
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US-10-141-531-130
US-10-141-531-130
US-10-141-531-130
US-10-141-531-139
US-10-085-198-122
US-10-092-411A-4248
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29.431 Million cell updates/sec
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Sequence 2, Appli
Sequence 5, Appli
Sequence 7614, Ap
Sequence 1886, Ap
Sequence 5488, Ap
Sequence 4529, Appl
Sequence 4529, Appl
Sequence 66, Appl
Sequence 94, Appl
Sequence 112, Appl
Sequence 112, Appl
Sequence 112, Appl
Sequence 113, Appl
Sequence 1148, Appl
Sequence 148, Appl
Sequence 148, Appl
Sequence 175, Appl
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Qy 2 KKVHEE 7	Query Match 88.9%; Score 32; DB 5; Best Local Similarity 100.0%; Pred. No. 3.8e+0; Matches 6; Conservative 0; Mismatches	RESULT 2 US-09-856-086-5 US-09-856-086-5 ; Sequence 5, Application US/09856086 ; GENERAL INFORMATION: ; APPLICANT: EBRINGER, ALAN ; TITLE OF INVENTION: DIAGNOSIS OF DEMYELINATING O) ; FILE REFERENCE: 78104.040 ; CURRENT APPLICATION NUMBER: US/09/856,086 ; CURRENT FILING DATE: 2001-07-30 ; NUMBER OF SEQ ID NOS: 7 ; SOCTWARE: PATENTIN VERSION 3.1 ; SEQ ID NO 5 ; LENGTH: 6 ; TYPE: PRT ; ORGANISM: Homo sapiens, Bos US-09-856-086-5	Hest Local Similarity 100.0%; Pred. No. 3.8e+0. Matches 7; Conservative 0; Mismatches 0 OY 1 LKKYHEE 7 I Db 1 LKKYHEE 7	r FILING DATE: 2001-07-30 OF SEQ ID NOS: 7 RE: PatentIn version 3.1 NO 2 3: 7 PRT PRT SEQ ID NOS: 7 100.0%; Score 36;	SEGULT 1 IS-09-856-086-2 Sequence 2, Application US/09856086 GENERAL INFORMATION: APPLICANT: EBRINGER, ALAN TITLE OF INVENTION: DIAGNOSIS OF DEMYELINATING FILE REFERENCE: 78104-040 CHEBENT ADDITION INFORMER INFORMATION OTHER OF THE REFERENCE: 78104-040	27 28 77.8 988 6 US-10-167-631A-3 28 27 78 1707 6 US-10-167-631A-2 29 28 77.8 1707 6 US-10-167-631A-2 29 28 77.8 1707 6 US-10-167-631A-2 30 27 75.0 61 5 US-09-513-999C-7340 31 27 75.0 105 6 US-10-092-411A-2943 33 27 75.0 248 5 US-09-849-772-8 35 27 75.0 248 5 US-09-849-772-8 36 27 75.0 256 6 US-10-136-728-70 37 75.0 561 6 US-10-136-728-72 38 26 72.2 150 6 US-10-136-728-72 39 26 72.2 150 6 US-10-136-728-72 39 26 72.2 150 6 US-10-136-728-72 42 26 72.2 372 6 US-10-92-411A-5144 42 26 72.2 373 6 US-10-092-411A-5144 43 26 72.2 443 6 US-10-092-411A-3463 44 26 72.2 694 6 US-10-092-411A-3463 45 26 72.2 693 6 US-10-092-411A-3463
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	ore 32, red. No Mismai	6 DEMYEL:	Misma	core 3	DEMKET P	10-167 10-167 10-167 10-192 110-092 110-194 10-184 10-184 10-264 10-264 10-192 110-193
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1 KKVHEE

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CURRENT APPLICATION NUMBER: US/10/264,237
CURRENT FILING DATE: 2002-10-04
PRIOR APPLICATION NUMBER: PCT/US01/16450
PRIOR FILING DATE: 2001-05-18
PRIOR APPLICATION NUMBER: US 60/205,515
PRIOR FILING DATE: 2000-05-19
NUMBER OF SEQ ID NOS: 2876
SOFTWARE: PALENTIN Ver. 3.1
SEQ ID NO 1886
; ORGANISM: Homo sapiens
US-10-264-237-1886
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; OTHER INFORMATION: Xee=Cys or Phe or His or Ile or Leu or Asn or Pro or Arg
US-09-513-999C-7614
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Best Local S
Matches 5
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APPLICANT: Birse et al.
TITLE OF INVENTION: Nucleic Acids, Proteins,
FILE REFERENCE: PA131P1
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CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR FILING DATE: 1999-02-26
NUMBER OF SEO ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 7614
LENGTH: 76
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APPLICANT: Giordano, C
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APPLICANT: Dumas Milne Edwards, J.B.
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RESULT 7

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Best Local Similarity
Tatches 5; Conserve
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CURRENT FILING DATE: 2002-03-07
PRIOR APPLICATION NUMBER: US 09/134,001
PRIOR FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR FILING DATE: 1997-11-08
PRIOR FILING DATE: 1997-08-14
NUMBER OF SEQ ID NOS: 5676
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                                                                                                                                                                          NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 5468
LENGTH: 66
                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: Dunas Milne Edwards, J.B.
APPLICANT: Duclert, A.
APPLICANT: Giordano, J.Y.
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Best Local Similarity
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CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
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                                                                                                                                                          LENGTH: 66
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                                                                                                                                              ORGANISM:
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14 LKGIHEE 20
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                                1 LKKVHEE 7
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                                                              Conservative
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100.0%; Pr
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Pred. No.
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Pred. No.
                                                         core 28; DB 5; ced. No. 16; Mismatches :
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RESULT 9
US-10-125-923A-30
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TYPE: PRI
; ORGANISM: Bacillus subtillis
US-10-141-531-23
Sequence 30, Application US/10125923A GENERAL INFORMATION:
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GENERAL INFORMATION:
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Best Local Similarity
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APPLICANT: Muchhal, Umesh
TITLE OF INVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activity
FILE REFERENCE: A-71457-2/RFT/RMS/RMK
CURRENT APPLICATION NUMBER: US/10/141,531
CURRENT FILING DATE: 2002-05-06
PRIOR APPLICATION NUMBER: US 60/370,609
PRIOR APPLICATION NUMBER: US 60/370,609
PRIOR PILING DATE: 2002-04-05
PRIOR FILING DATE: 2001-05-04
NUMBER OF SEO ID NOS: 208
                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US 60/064,964 PRIOR FILING DATE: 1997-11-08 PRIOR APPLICATION NUMBER: US 60/055,779 PRIOR FILING DATE: 1997-08-14 NUMBER OF SEQ ID NOS: 5676
                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/092,411A CURRENT FILING DATE: 2002-03-07 PRIOR APPLICATION NUMBER: US 09/134,001 PRIOR FILING DATE: 1998-08-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Lynn Doucette-Stamm et al APPLICANT: Lynn Doucette-Stamm et al TITLE OF INVENTION: NUTLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS TITLE OF INVENTION: EPILERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS FILE REFERENCE: 032796-101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: P
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Desjarlais, John R.
Heifetz, Peter
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71.4%;
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3; Mismatc
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Pred. No. 37
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; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-125-923A-30
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S-10-141-531-66
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Best Local
SOFTWARE: PA
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LENGTH: 280
                                                                                                                                                                                                                                                                                                                                                                   Sequence 66, Application US/10141531 GENERAL INFORMATION:
                                                                                                                                    APPLICANT: Muchhal, Umesh
TITLE OF INVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activity
FILE REFERENCE: A-71457-2/RFT/RMS/RMK
CURRENT APPLICATION NUMBER: US/10/141,531
CURRENT FILING DATE: 2002-05-06
CURRENT FILING DATE: 2002-05-06
                                   PRIOR FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 208
                                                        PRIOR APPLICATION NUMBER: US 60/289,029 PRIOR FILING DATE: 2001-05-04
                                                                                              PRIOR FILING DATE: 2002-04-05
                                                                                                                                                                                                                                                                               APPLICANT: Briggs, Steven P.
APPLICANT: Dalmia, Bipin K.
APPLICANT: del Val, Greg
APPLICANT: Desjarlais, John
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PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1997-10-24
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PRIOR FILING DATE: 2002-01-15
PRIOR APPLICATION NUMBER: 60/059263
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059266
DELIC STILL CATTON NUMBER: 60/059266
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CURRENT FILING DATE: 2002-01-15
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FILING DATE: 1997-10-21
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                                                                                                                                                                                                                                         Heifetz, Peter
Luginbuhl, Pet
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Gurney, Austin L.
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85.7%;
                                                                                                                                                                                                                                             Peter
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Pred. No.
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; TYPE: PRT
; ORGANISM: Bacillus subtilis
US-10-141-531-66
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SOFTWARE: PatentIn version 3.1
SEQ ID NO 85
LENGTH: 316
TYPE: PRT
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Best Local Similarity 57.1
          APPLICANT: Desjariais, John R.
APPLICANT: Heifetz, Peter
APPLICANT: Luginbuhl, Peter
APPLICANT: Muchhal, Umesh
TITLE OF INVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activity
FILE REFERENCE: A-71457-2/RFT/RMS/RMK
CURRENT APPLICATION NUMBER: US/10/141,531
CURRENT FILING DATE: 2002-05-06
PRIOR APPLICATION NUMBER: US 60/370,609
PRIOR FILING DATE: 2002-04-05
PRIOR FILING DATE: 2001-05-04
NIMBER OF SEC IN NUMBER: US 60/289,029
NIMBER OF SEC IN NO. 2001-05-04
NIMBER OF SEC IN NO. 2001-05-04
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204 VKEIHEE 210
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INFORMATION:
SEQ ID NOS: 208
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57.1%;
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US-10-141-531-103
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PRIOR FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin version 3.1
SEQ ID NO 103
LENGTH: 316
TYPE: PRT
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Best Local S
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LENGTH: 316
TYPE: PRT
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                APPLICANT: Desjarlais, John R.
APPLICANT: Heifetz, Peter
APPLICANT: Luginbuhi, Peter
APPLICANT: Muchhal, Umesh
TITLE OF INVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activit
FILE REFERENCE: A-71457-ZAFT/RMS/RMK
CURRENT APPLICATION NUMBER: US/10/141,531
CURRENT FILING DATE: 2002-05-06
PRIOR APPLICATION NUMBER: US 60/370,609
PRIOR FILING DATE: 2002-04-05
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Best Local Similarity
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mes 4; Conserv
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Dalmia, Bipin K.
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Luginbuhl, Peter
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57.1%;
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US 60/289,029
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APPLICANT: Briggs, Steven P.
APPLICANT: Dalmia, Bipin K.
APPLICANT: Desparials, John R.
APPLICANT: Desparials, John R.
APPLICANT: Heifetz, Peter
APPLICANT: Heifetz, Peter
APPLICANT: Muchhal, Umesh
TITLE OF INVENTION. Nucleic Acids and Proteins with Thioredoxin Reductase Activity
FILE REFERENCE: A-71457-2/RFT/KMS/RMK
CURRENT APPLICATION NUMBER: US/10/141.531
CURRENT APPLICATION NUMBER: US 60/370,609
PRIOR FILING DATE: 2002-05-06
PRIOR FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin version 3.1
SEQ ID NO 121
SEQ ID NO 121
SEQ ID NO 121
ORGANISM: Artificial sequence
FEATURE:
FEATURE:
FORTHER INFORMATION: Bacillus subtillis variant
US-10-141-531-121
Search completed: November 13, 2002, 13:39:38 Job time: 2.82979 secs
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NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin version 3.1
SEQ ID NO 112
LENGTH: 316
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
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Best Local Similarity 57.1%;
Matches 4; Conservative
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Best Local Similarity 57.1%;
Matches 4; Conservative
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204 VKEIHEE 210
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Pred. No. 74;
3; Mismatches 0; Indels
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Maximum Match 100%
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 fructose-bisphospl
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Query Match Best Local S Matches 7

Similarity 100 7; Conservative

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Length 287;

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ed. No. 8.8; Mismatches

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RESULT 1 A21762 A21762 C;Species: Rattus norvegicus (Norway rat) C;Species: Rattus norvegicus (Norway rat) C;Accession: A21762 C;Accession: A21762 R;Julien, J.P.; Ramachandran, K.; Grosveld, Blochim. Biophys. Acta 825, 398-404, 1985 A;Title: Cloning of a cDNA encoding the sma A;Reference number: A21762; MUID:85252830; A;Accession: A21762 A;Status: preliminary A;Molecule type: mRNA A;Residues: 1-287 <jul> A;Cross references: GB:M25638; NID:g205683; C;Superfamily: cytoskeletal keratin C;Keywords: coiled coil</jul>		
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desmin - golden hamster (fragment) C;Species: Mesocricetus auratus (golden hamster) C;Species: Mesocricetus auratus (golden hamster) C;Accession: A02956 C;Accession: A02956 R;Quax, W.; van den Heuvel, R.; Egberts, W.V.; Quax-Jeuken, Y.; Bloemendal, H. Proc. Natl. Acad. Sci. U.S.A. 81, 5970-5974, 1984 A;Title: Intermediate filament cDNAs from BHK-21 cells: demonstration of distinct A;Reference number: A02956; MUID:85014890; PMID:6091127 A;Reference number: A02956; MUID:85014890; PMID:6091127 A;Cross-references: GB:KO2407; NID:g191356; PIDN:AAA37071.1; PID:g387070 A;Experimental source: baby hamster kidney cells, BHK-21 C;Comment: There is a single gene for desmin in the hamster genome. C;Keywords: colled coll; intermediate filament F;245-298/Domain: tail <TLE> δã В δÃ RESULT Query Match Best Local S Matches 7 1 LKKVHEE 7 |||||| 26 LKKVHEE 32 N 1 LKKVHEE 7 Similarity 7; Conserv 100.0%; ilarity 100.0%; Conservative (0, Score 36; Pred. No. Mismatches 9 DB 1; 0 Length 298; Indels demonstration of distinct gen 0, Gaps 0

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F;100-407/Domain: rod <ROD>
F;100-132/Region: coil lA
F;133-142/Region: linker 1
F;143-243/Region: coil lB
F;244-259/Region: linker 12
F;260-278/Region: coil 2A
F;279-286/Region: linker 2
F;287-407/Region: linker 2
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A; Molecule type: protein
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A; Residues: 110-118; 255-266; 274-282; 393-401 <GE3>
C; Comment: This protein was isolated from chicken gizzard.
C; Comment: There appears to be a single desmin gene in the haploid chicken genome that if predominantly in skeletal, cardiac, and most types of smooth muscle cells during myogenic; Comment: Desmin intermediate filaments are found in the cytoplasm of cultured myogenic cting myofibrils to each other and to the plasma membrane from the periphery of the Z-li
                                                                                                                                                                                                                                                                                                             cting myofibrils to each other and to the plasma membrane from the content of the plasma membrane from the content of the cont
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R; Kitamura, S.; Ando, S.; Shibata, M.; Tanabe, K.; Sato,
J. Biol. Chem. 264, 5674-5678, 1989
A;Title: Protein kinase C phosphorylation of desmin at fo
A: Reference number: A32858; MUID:89174618; PMID:2494168
A; Molecula ****
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Eur. J. Blochem. 206, 841-852, 1992
A;Title: Chemical cross-linking indicates a staggered and A;Reference number: S23189; MUID:92299013; PMID:1606966
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A; Accession: S23189
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A; Residues: 10-14; 28-42; 49-59 <KIT>
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A; Residues: 5-9;16-27;63-67 < KUS>
R; Getsler, N; Webber, K
EMBO J. 7, 15-20, 1988
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A;Title: cdc2 Kinase phosphorylation of desmin at three serial A;Reference number: JC1459; MUID:93176201; PMID:8439342
A;Accession: JC1459
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A;Title: Characterization and regulation in the expression A;Reference number: A94014; MUID:85063701; PMID:6594672
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C;Date: 18-Dec-1981 #sequence_revision 12-Apr-1996 #t
C;Accession: A90969; A94014; JC1459; S02448; A32858;
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A; Residues: 366-463 <CAP>
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desmin - rat
C;Species: Rattus norvegicus (Norway
C;Date: 29-May-1998 #sequence_revisio
C;Accession: I52469
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R; van Groningen, J.J.; Bloemers, H.P.
Biochim. Biophys. Acta 1217, 107-109,
A;Tille: Rat desmin gene structure an
A;Reference number: I52469; MUID:9411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Map position: 2q35-2q35
A; Introns: 192/2; 212/3; 244/3; 298/
C; Superfamily: cytoskelettal keratin
C; Keywords: acetylated amino end; cc
F; 2-469/Product: desmin #status pred
                                                                                                                                                                                                                                                                                                                                                                                                                                                               F;2/Modified site: acetylated amino end (Ser) (in mature form) #status pr
F;7,32/Binding site: phosphate (Ser) (covalent) (by cdc2 kinase) #status
F;13,48/Binding site: phosphate (Ser) (covalent) (by protein kinase C) #s
F;45,60/Binding site: phosphate (Ser) (covalent) (by cAMP-dependent kinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Accession: JE0063
A;Mccession: JE0063
A;Molecule type; DNA
A;Molecule type; DNA
A;Residues: 1-469 <LIZ>
A;Cross-references: GB:M63391; GB:M26935; GB:M58168; GB:M59379; GB:M65071; GB:X5315
A;Note: the introns of this gene contain 1.2K of repetitive sequences belonging to C;Comment: Desmin intermediate filaments are found in the cytoplasm of cultured myo cting myofibrils to each other and to the plasma membrane from the periphery of the
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F;416-469/Domain: tail <END>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N;Alternate names: type III intermediate filament (;Species: Homo sapiens (man) C;Date: 31-Mar-1990 #sequence_revision 31-Mar-1990 C;Accession: JE0063 R;Li, Z.; Lillenbaum, A.; Butler-Browne, G.; Pauli Gene 78, 243-254, 1989 A;Title: Human desmin-coding gene: complete nucleo A;Reference number: JE0063; MUID:89378751; PMID:26
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F;408-463/Domain: tail <END>
F;408-463/Domain: tail <END>
F;408-463/Domain: tail <END>
F;10/Modified site: blocked amino end (Ser) (probably acetylated) #status experiment F;6,22/Binding site: phosphate (Ser) (covalent) (by cdc2 kinase) #status experiment F;12,29,38,56/Binding site: phosphate (Ser) (covalent) (by protein kinase C) #statu F;29,35,50/Binding site: phosphate (Ser) (covalent) (by cAMP-dependent kinase) #status experimental F;64/Binding site: phosphate (Thr) (covalent) (by cdc2 kinase) #status experimental
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F;2-108/Domain: head <HED>
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itive 0;
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MUID:89378751; pMID:2673923
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                                                                  H.P.;
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LKKVHEE

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R;Li, H.; Capetanaki, Y.
gubmitted to the EMBL Data Library, December
A;Description: Regulation of the Mouse Desmin
A;Reference number: $31404
A;Accession: $31404
A;Accession: $31404
A;Residues: 1-40 <LIH>
                                                                                                                                                                                                                                                                                                            C;Species: Mus musculus (house mouse)
C;Date: 02-Aug-1994 #sequence_revision 02-Aug-1994 #text_change 19-Apr-1996
C;Accession: A54104; S31404
R;Li, H.; Choudhary, S.K.; Milner, D.J.; Munir, M.I.; Kuisk, I.R.; Capetanaki, J. Cell Biol. 124, 827-841, 1994
A;Title: Inhibition of desmin expression blocks myoblast fusion and interferes A;Reference number: A54104; MUID:94165148; PMID:8120103
A;Accession: A54104
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A; Residues: 1-469 <RES>
A; Cross-references: EMBL: X73524; NID: g452778; PIDN: CAA51920.1; PID: g452779
C; Superfamily: cytoskeletal keratin
                                                                  A;Cross-references: EMBL:218892
C;Superfamily: cytoskeletal ker
C;Keywords: muscle
                                                                                                                                                                                                                                            A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-469 <LIA>
A;Cross-references: GB:L22550
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A; Residues: 1-469 <QUA>
A; Cross-references: GB:M12104; NID:g191360; PIDN:AAA37072.1; PID:g387071
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R;Quax, W.; van den Broek, L.; Egberts, W.V.; Ramaekers, F.; Bloemendal, H. Cell 43, 327-338, 1985
A;Title: Characterization of the hamster desmin gene: expression and formation A;Reference number: A24783; MUID:86079506; PMID:3855248
A;Accession: A24783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Species: Mesocricetus auratus (golden hamster)
C;Date: 22-Jul-1987 #sequence_revision 22-Jul-1987 #text_change 13-Aug-1999
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A; Molecule type: DNA
A; Residues: 1-5,'Y',7-8,'Y',10-28 <RES>
A; Cross-references: GB:M55423; NID:9200027;
C; Comment: This is the most abundant of the C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R; Nakahira, K.; Ikenaka, K.; Wada, K.; Tamura, T.
J. Biol. Chem. 265, 19786-19791, 1990
A;Title: Structure of the 68-KDa neurofilament gene and A;Reference number: 155316; MUID:91060592; PMID:2246261
A;Accession: 155316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Cross-references: GB.X02165
A;Experimental source: brain
R;Julien, J.P.; Meyer, D.; Flavell, D.; Hurst, J.; Grosveld, Brain Res. Mol. Brain Res. 1, 243-250, 1986
A;Title: Cloning and developmental expression of the murine A;Reference number: A43772
A;Accession: A43772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Molecule type: mRNA
A;Residues: 1-5, 'Y', 7-8, 'Y', 10-64,'M', 66-72, 'L', 74-98, 'D', 100-194,'R', 196-202,
A;Cross-references: GB:M20480; NID:g200037; PIDN:AAA39814.1; PID:g200038
A;Note: the authors translated the codon CGC for residue 195 as Ala
R;Sihag, R.K.; Nixon, R.A.
J. Biol. Chem. 266, 18861-18867, 1991
A;Title: Identification of Ser-55 as a major protein kinase A phosphorylation
A;Reference number: A41012; MUID:92011653; PMID:1717455
A;Accession: A41012
                                               F:139-234/Domain: coil 1b, alpha-helical F:235-256/Region: linker 12 F:257-272/Domain: coil 2a, alpha-helical F:273-281/Region: linker 2 F:282-401/Domain: coil 2b, alpha-helical F:404-543/Domain: tail <TAI>
                                                                                                                                                                                                                                                             A;Introns: 349/3; 391/2; 498/1
C;Superfamily: cytoskeletal keratin
C;Keywords: coiled coil; intermediate filament
E;2-72/Domain: head <HED>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R;Lewis, S.A.; Cowan, N.J.

J. Cell Biol. 100, 843-850, 1985

A;Title: Genetics, evolution, and expression of the 68,000-mol-wt neurofilament

A;Reference number: A26562; MUID:85131334; PMID:3919033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: GB:M13016; A;Note: the authors translated 1 as Glu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Title: Anomalous placement of introns in a member of the A;Reference number: A25227; MUID:87064433; PMID:3785173 A;Accession: A25227
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C;Date: 31-Mar-1988 **sequence_revision 30-Sep-1993 *text_change
C;Accession: A25227; A26562; A43772; A41012; I55316
R;Lewis, S.A.; Cowan, N.J.
                                                                                                                                                                                                        F;94-125/Domain: coil la, alpha-helical rod #status
F;126-138/Region: linker 1
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A; Residues: 242-543 <LE2>
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A; Residues: 1-543 <LEW>
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tail subdomain
                                                                                                                                                                                  alpha-helical rod #status
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                                                                           #status predicted <R2B;
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C;Accession: B44841
R;Charnas, L.R.; Szaro, B.G.; Galner, H.
J. Neurosci. 12, 3010-3024, 1992
A;Title: Identification and developmental expression of A;Reference number: A44841; MUID:92356194; PMID:1494944
A;Accession: B44841
                                                                                                                                               RESULT 10
B44841
B44841
Low molecular weight neurofilament protein XNF-L - African clawed frog C:Species: Xenopus laevis (African clawed frog)
C:Date: 31-Mar-1993 #sequence_revision 18-Nov-1994 #text_change 12-Apr C:Accession: B44841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-10 (POS>
A;Cross-references: GB:S70309; NID:g547176; PIDN:AAD14057.1; PID:g4261757
A;Cross-references: GB:S70309; NID:g547176; PIDN:AAD14057.1; PID:g4261757
A;Komata, Y.; Watanabe, T.; Wada, H.
J. Biochem. 93, 825-831, 1983
A;Title: Highly acidic proteins from human brain: purification and proper
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A;Cross-references: GDB:120227; OMIM:162280
A;Map position: 8p21-8p21
A;Introns: 349/3; 391/2; 498/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Species: Homo sapiens (man)
C;Date: 29-Jan-1993 #sequence_revision 29-Jan-1993 #text_change 21-Jul-2000
C;Accession: S07144; I52832; A60703
R;Julien, J.P.; Grosveld, F.; Yazdanbaksh, K.; Flavell, D.; Meijer, D.; Mushynski, W. Biochim. Biophys. Acta 909, 10-20, 1987
A;Title: The structure of a human neurofilament gene (NF-L): a unique exon-intron organi A;Reference number: S07144; MUID:87214213; PMID:3034332
A;Accession: S07144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A:Title: Highly acidic proteins from human brain: purification and properties of Glu-50 A; Reference number: A60703; MUID:83265667; PMID:6135695.
A; Accession: A60703
A; Accession: A60703
A; Molecule type: protein
A; Molecule type: protein
A; Residues: 469-472, 'D',474 < NOM>
A; Residues: 469-472, 'D',474 < NOM>
A; Rote: This acidic protein is named for its greater than fifty per cent glutamic acid contents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Cross-references: EMBL:X05608; NID:g1495072; PIDN:CAA29097.1; PID:g1279504
A;Note: the authors translated the codon Arg for residue 366 as Asn
R;Pospelov, V.A.; Pospelova, T.V.; Julien, J.P.
Cell Growth Differ. 5, 187-196, 1994
A;Title: AP-1 and Krox-24 transcription factors activate the neurofilament 1
A;Reference number: I52832; MUID:94235564; PMID:8180132
A;Accession: I52832
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A; Residues: 1-544 < JUL>
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;Reywords: brain; coiled coil; intermediate filament
;469-544/Product: Glu-50 peptide #status predicted <;
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Pred. No. 16;
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                                                                                                                                                         #text_change 12-Apr-1995
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A; Molecule type: protein
A; Molecule type: protein
A; Residues: 9-14;23-29;30-53 <GON>
A; Residues: 9-14;23-29;30-53 <GON>
C; Comment: Manmalian neurofilament proteins: a conserved alpha-helical region, whose c; Comment: The amino-terminal headplece is basic with a high content of hydroxyamine al beta turns; domain b is acidic and rich in glutamic acid and lysine residues.
C; Comment: The extra mass and high charge density that distinguish the neurofilamen charged scaffolding structure suitable for interaction with other neuronal compones C; Comment: The boundaries of the domains between residues 70-92 and 399-402 are not C; Comment: This protein was isolated from spinal cord.
C; Superfamily: cytoskeletal keratin
C; Keywords: coiled coil; intermediate filament
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: protein
A; Residues: 1-82;278-548 <GEZ>
A; Note: residue 322 is either lysine or arginine
A; Gonda, Y.; Nishizawa, K.; Ando, S.; Kitamura, S.; Minoura,
Blochem. Biophys. Res. Commun. 167, 1316-1325, 1990
A; Title: Involvement of protein kinase C in the regulation of
A; Reference number: A34569; MUID:90211318; PMID:2108674
A; Accession: A34569
A; Status: preliminary
A; Status: preliminary
                                                                                                                                                       F; 255-399/Domain:
F; 402-548/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Title: Neurofilament architecture combines structural principles of intermediate A;Reference number: A90973
A;Accession: A90973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: protein
A; Residues: 1-547 <GE1>
R; Geisler, N.; Kaufmann, E.;
EMBO J. 2, 1295-1302, 1983
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QFPGL
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C;Species: Sus scrofa domestica (domestic pig)
C;Date: 15-Nov-1984 #sequence_revision 28-May-1986 #text_change
C;Accession: A91337; A90973; A34569; A02963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Reference number: A; Accession: A91337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Title: The complete amino acid sequence of the major mammalian A; Reference number: A91337; MUID:85154583; PMID:3920075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Geisler, N.; Plessmann, U.; Weber, FEBS Lett. 182, 475-478, 1985
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A:Molecule type: mRNA
A:Molecule type: mRNA
A:Molecule type: mRNA
A:Residues: 1-544 <CHA>
A:Experimental source: brain
A:Note: sequence inconsistent with the nucleotide translation
A:Note: sequence extracted from NCBI backbone (NCBIN:110225, NC:Superfamily: cytoskeletal keratin
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                                                                                                                                                                       137-232/Domain: coil 1b, alpha-helical rod 255-399/Domain: coil 2, alpha-helical rod
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221 LKKVHEE 227

1 LKKVHEE

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RESULT 13
B46024 .
                                                                                                                                                                                submitted to the EMBL Data A; Reference number: Z19209 A; Accession: T1995
                                                                                                                                                                                                                                                                                      hypothetical protein C47D12.5 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
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A;Title: Domain- and site-specific phosphorylation of bovine NF-L by Rho-associated kins A;Reference number: JW0094; MUID:98238650; PMID:9571164
                                                                                          A; Cross-references:
                                                                                                          A; Molecule type: DNA
A; Residues: 1-410 <WIL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Experimental source: subsp. japonica, TKP
A;Note: sequence inconsistent with the nucleotide translation
A;Note: sequence extracted from NOBI backbone (NCBIN:129455, NCBIP:129482)
C;Superfamily: cytoskeletal keratin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Title: Neurofilament deficiency in quail caused by nonsense mutation in A;Reference number: A46024; MUID:93224534; PMID:8468353
A;Accession: B46024
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R; Ohara, O.; Gahara,
J. Cell Biol. 121, 3
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C;Date: 21-Sep-1993 #sequence_revision 18-Nov-1994 #text_change 12-Apr-1995
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A;Residues: 1-554 CHAS>
C;Comment: Domain- and site-specific phosphorylation by Rho-kinase regulates the assemb:
C;Superfamily: cytoskeletal keratin
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                                                              A; Experimental source:
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Date: 03-Jul-1998 #sequence_revision 10-Jul-1998 #text_change 07-May-1999
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e: CESP:C47D12.5
position: 2
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222 LKKVHEE 228
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1-556 <OHA>
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ilarity 100.0%;
Conservative 0,
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                                                                EMBL:269902; PIDN:CAA93763.1; GSPDB:GN00020; CESP:C47D12.5
ce: clone C47D12
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Search completed: November 13, Job time: 12.0152 secs

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A;Molecule type: mRNA
A;Residues: 1-458 <HER>
A;Cross-references: GB:X16842; NID:g64652; PIDN:CAA34740.1; PID:g64653
C;Superfamily: cytoskeletal keratin
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                                                                                                                                                                                                                    A;Title: Expression of intermediate filament proteins during development of Xenopus A;Reference number: A43554; MUID:90032404; PMID:2806128 A;Accession: A43554
                                                                                                                                                                                                                                                                                                                    desmin - African clawed frog
C;Species: Xenopus laevis (African clawed frog)
C;Date: 01-Dec-1992 #sequence_revision 01-Dec-1992 #text_change 13-Aug-1999
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                                  · 1 LKKVHEE 7
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ster than or equal to the score of the result being printed,
rived by analysis of the total score distribution.
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                                                                                 VIME_HUMAN
PERI_RAT
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DING_BACSU
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DESM_MESAU
DESM_MOUSE
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P17661 homo sapien
P02540 sus scrofa
P19527 rattus norv
P08551 mus musculu
P07196 homo sapien
P35616 xenopus lae
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P48676
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083940 treponema p	EPA	Y975_TREPA	<u> </u>	ن د	α		
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Q9zch7 rickettsia	CPR	KGUA_RICPR		i.	α		. د
O66651 aquifex aeo	AE	SYI_AQUAE	-	, <u>i</u>	<u>a</u>		. د
Q9y211 homo sapien	MAN	RR44_HUMAN	ب.	928	80	31	υ 4

This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way SEQUENCE OF 1-88 AND 254-415. MEDILINE-83025086; PubMed-6899923; Geisler N., Kaufmann E., Weber K.; "Proteinchemical characterization of three structurally distinct domains along the protofilament unit of desmin 10 nm filaments."; ceil 30:277-286(1982). 21-JUL-1986 23-OCT-1986 16-OCT-2001 "Comparison of the proteins of two immunologically distinct intermediate-sized filaments by amino acid sequence analysi and vimentin."; SEQUENCE OF 324-463. MEDLINE-82037793; PubMed-6945574; Geisler N., Weber K.; Geisler N., Weber K.; "The amino acid sequence of chicken muscle desmin provides structural model for intermediate filament proteins."; EMBO J. 1:1649-1656(1982). Proc. Natl. SEQUENCE. TISSUE-G1zzard; MEDLINE-84207925; PubMed-6202512; Gallus gallus (Chicken). Eukaryota; Metazoa; Chordata; NCBI_TaxID=9031; Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae; Desmin. Acad. (Rel. (Rel. (Rel. Sci. 01, Created) 02, Last sequence up 40, Last annotation U.S.A. 78:4120-4123(1981). update) analysis: desmin ø coding

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European Bioinformatics Institute.

There are

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Matches 7
                                                          distinct genes for desmin and vimentin in all vertebrate classes proc. Natl. Acad. Sci. U.S.A. 81:5970-5974 (1984).

- FUNCTION: DESMIN ARE CLASS-III INTERMEDIATE FILAMENTS FOUND MUSCLE CELLS. IN ADULT STRIATED MUSCLE THEY FORM A FIDROUS NETWORK CONNECTING MYOFIBRILS TO EACH OTHER AND TO THE PLAN MEMBRANE FROM THE PERFERRY OF THE Z-LINE STRUCTURES.

- I- SUBCELLULAR LOCATION: Cytoplasmic.

- SUBCELLULAR LOCATION: Cytoplasmic.
                                                                                                                                                                                                                                   Quax W.J., van den Heuvel R., Egberts W.V., Quax Bloemendal H.;
"Intermediate filament cDNAs from BHK-21 cells:
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01-NOV-1988
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P02541;
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Mammalia; Eutheria;
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Pfam; PF00038; filament; 1.
PROSITE; PS00226; IF; 1.
Intermediate filament; Coiled
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Rodentia;
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LINKER 1.
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Best Local
     "Regulation of the mouse desmin gene: transactivated by MyoD, myogenin, MRF4 and Myf5.";
Myogenin, MRF4 and Myf5.";
Nuccleic Acids Res. 21:335-343(1993).
-I- FUNCTION: DESMIN ARE CLASS-III INTERMEDIATE FILAMENTS FOUND IN MUSCLE CELLS. IN ADULT STRIATED MUSCLE THEY FORM A FIBROUS NETWORK CONNECTING MYOFIBRILS TO EACH OTHER AND TO THE PLASMA MEMBRANE FROM THE PERIPHERY OF THE 2-LINE STRUCTURES.
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EMBL; K12104; AAA37072.1;
EMBL; M12102; AAA37072.1;
EMBL; M12103; AAA37072.1;
EMBL; M12103; AAA37072.1;
PIR; A02956; DMHY.
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16-OCT-2001
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                                                                                     STRAIN-BALB/c; TI;
MEDLINE-93181210;
                                                                         Li H., Capetanaki Y.;
                                                                                                         SEQUENCE OF 1-39 FROM N.A.
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Mammalia; Eutheria;
NCBI_TaxID=10090;
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InterPro; IPR001664; IF.
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or send an email to
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 SUBUNIT:
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                                                                                                                                                                                                                                                                                                                                                                                          Similarity 7; Conserv
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Metazoa; Chordata; C
Metazoa; Rodentia; S
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                                                                                             TISSUE-Spleen;
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S.K., Milner D.J.,
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Sciurognathi; Muridae; Murinae; Mus
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Pred. No.
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WMEDLINE-9411456; PubMed-8286410;
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EMBL; Z18892; CAA79330.1; -.
PIR; S31404; S31404.
SWISS-2DPAGE; P31001; MOUSE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa;
Mammalia; Eutheria;
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סם; Chordata;
la; Rodentia;
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SEQUENCE FROM N.A.

STRAIN-Holstein; TISSUE-Muscle;
Chikuni K., Tanabe R., Muroya S.;

"Desmin structure as related to meat tenderness.";

"Desmin structure as related to meat tenderness.";

Submitted (MAR-1998) to the EMBL/GenBank/DDBJ databases.

-I- FUNCTION: DESMIN ARE CLASS-III INTERMEDIATE FILAMENTS FOUND MUSCLE CELLS. IN ADULT STRIATED MUSCLE THEY FORM A FIBROUS NETWORK CONNECTING MYOFIBRILS TO EACH OTHER AND TO THE PLASM NETWORK CONNECTING MYOFIBRILS TO EACH OTHER AND TO THE PLASM
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         EMBL;
                                       This SWISS-PROT entry is copyright. It is produced through a between the Swiss Institute of Bioinformatics and the EMBL the European Bioinformatics Institute. There are no restrictuse by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and fentities requires a license agreement (See http://www.isb-sibor send an email to license@isb-sib.ch).
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SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY.
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European Bioinformatics Institute. There are no
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P17661; Q15787;
O1-AUG-1990 (Rel. 1
30-MAY-2000 (Rel. 1
16-CCT-2001 (Rel. 4
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SEQUENCE
                                 "Missense mutations in desmin
skeletal myopathy.";
Nat. Genet. 19:402-403(1998).
                                                                                                                                                   MEDLINE-96384956; PubMed-8792816;
Vicart P., Dupret J.M., Hazan J., Li Z., Gyapay G., Kris)
Weissenbach J., Fardeau M., Paulin D.;
Weissenbach J., Fardeau M., Paulin D.;
"Human desmin gene: cDNA sequence, regional localization
exclusion of the locus in a familial desmin-related myopa
Hum. Genet. 98:422-429(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Gene 78:243-254(1989).
VARIANT CSM 172-ARG--GLU-178 DEL.
MEDLINE-98409654; PubMed-9736733;
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MEDLINE-89378751; Pubm
Li Z., Lilienbaum A.,
"Human desmin-coding g
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LINKER 12.
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C7275DC3E528DFF5 CRC64;
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nucleotide sequence,
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HSC-2DPAGE; P17661; HUMAN
Genew; HGNC:2770; DES.
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/FTId=VAR_007901. N -> I (IN CSM; HES GIVES A SEVERE CMS

HETEROZYGOUS WITH PRO-358

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/FTId-VAR_009189.
A -> P (IN CSM; HET GIVES A SEVERE CMS

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(IN HDM)

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/FTId-VAR_009188.
A -> P (IN CSM; MILD ADULT-ONSET).
/FTId-VAR_007900.

SEVERE FORM).

IPR001664; IF

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AT AUTOSOMAL COMMINANT CLISTAL MYOPATHY, AND EXERTISE A COMMINANT NEGATIVE PERFECT ON FILAMENT FOUND IN MOL. Genet. 8:2191-2198 (1999).

**Hum. MOL. Genet. 8:2191-2198 (1999).

**Hum. MOL. Genet. 8:2191-2198 (1999).

**COMMINISTRY DESMIN ARE CLASS-III INTERMEDIATE FILAMENTS FOUND IN MUSCLE CELLS. IN ADULT STRIATED MUSCLE THEY FORM A FIBROUS NETWORK CONNECTING MYOFIBRILS TO EACH OTHER AND TO THE PLASMA COMBRANE FROM THE PERIPHERY OF THE 2-LINE STRUCTURES.

**COMMINISTRY HOMOPOLYMER.**

**COLUMNIT: HOMO
EMBL; M63391; AAA99221.1;
EMBL; U59167; AAC50680.1;
PIR; JE0063; DMHU.
                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioliformatics and the Exthe European Bioliforformatics Institute. There are no restruse by non-profit institutions as long as its content modified and this statement is not removed. Usage by and entitles requires a license agreement (See http://www.isb-sor send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE-20014709; pubMed-10545598; Sjoeberg G., Saavedra-Matiz C.A., Horowitz S.H., Sejersen T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Munoz-Marmol A.M., Strasser G., Isamat M., Roca X., Vela E., Mate J.L., Coll F. Frin Navas-Palacios J.J., Ariza A., Fuchs E.; "A dysfunctional desmin mutation in a patic
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EMBL;
                                                                                                                                                                                                               "Comparison of the proteins of two immunologically distinct intermediate-sized filaments by amino acid sequence analysis: de and vimentin.";

Proc. Natl. Acad. Sci. U.S.A. 78:4120-4123(1981).

-I- FUNCTION: DESMIN ARE CLASS-III INTERMEDIATE FILAMENTS FOUND MUSCLE CELLS. IN ADULT STRIATED MUSCLE THEY FORM A FIBROUS NETWORK CONNECTING MYOFIBRIES TO EACH OTHER AND TO THE PIASM MEMBRANE FROM THE PERLPHERY OF THE Z-LINE STRUCTURES.

-I- SUBCELLULAR LOCATION: Cytoplasmic.
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                                                                     the European Bioinformatics Institute. The 
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or send an email to license@isb-sib.ch).
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Tuggle C.K., Sanchez-Serrano I., Smith B., Marklund L., E
"Muscle ESTs II: cloning, sequencing and mapping the pig
intermediate filament protein desmin (DES).";
Submitted (MAR-1999) to the EMBL/GenBank/DDBJ databases.
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Beuzen N.D., Hall A.D., Gallagher
"A polymorphic CT-repeat at the pomeat quality.";
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15-JUL-1999 (Rel
15-JUN-2002 (Rel
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Chikuni K., Tanabe
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Mammalia; Eutheria;
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AF136188; AAD46492.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ., Muroya S.; related to meat tenderness."; to the EMBL/GenBank/DDBJ databases
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Best Local
"Glycosylation of mammalian r O-linked N-acetylglucosamine L and M.";
                                                                                                                                       SEQUENCE OF 1-10 FROM N.A.

MEDLINE-95264348; PubMed-774561;
MEDLINE-95264348; Palm G., Palgi J., Palm K.,
Falgi J., Palm K.,
Thermodynam T., Palgi J., Palm T.,
Thermodynam T., Palgi J., Palm
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01-FEB-1991 (Rel. 17, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Neurofilament triplet L protein (68 kDa neurofilament
(Neurofilament light polypeptide) (NF-L).
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P19527;
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PROSITE;
                                                       CARBOHYDRATE-LINKAGE SITES.
MEDLINE-9336421; PubMed-8344946;
Dong D.L.-Y., Xu Z.-S., Chevrier
Hart G.W.;
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MEDLINE-85252830; PubMed-3925999;
Julien J.-P., Ramachandran K., Gr
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Mammalia; Eutheria;
NCBI_TaxID=10116;
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PIR; P
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A02955; DMI
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Rodentia;
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COIL 2A.
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STUTTER.
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Pred. No. 5.2
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A2A8F7A8DB65DD12 CRC64;
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Sciurognathi;
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BY SIMILARITY.
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                                                                                                                                                           responsive
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thi; Muridae;
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EMBL; M25638; AAA41694.1;
EMBL; X53981; CAA37931.1;
PIR; A21762; A21762.
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FUNCTION: NEUROFILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, MAND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER. AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER. DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT PROTEINS ARE DUE TO THE TALLPIECE EXTENSIONS. THIS REGION MAY FO A CHARGED SCAPFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH OTHER NEURONAL COMPONENTS OR IONS.

FIM: O-GLYCOSYLATED; CONTAINS THREE N-ACETYLGLUCOSAMINE SIDE
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                                                                                      LKKVHEE
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en the Swiss Institute of Bioinformatics and the EN
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TAIL, SUBDOMAIN B (ACIDIC).
O-LINKED (GLCNAC).
/FTId=CAR_000128.
                                                                                                                                                                                                                                                         O-LINKED (GLCNAC).
                                                                                                                                        Score 36;
Pred. No.
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                                 PRT;
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EMBL; X02165; CAB51616.1; -.
EMBL; M20480; AAA39814.1; -.
EMBL; M13016; AAA39810.1; -.
EMBL; M55423; AAA39812.1; -.
PIR; A25227; QFMSL.
                                                                                                                                                                                              use by non-profit institutions as long modified and this statement is not removed. entitles requires a license agreement (See or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a between the Swiss Institute of Bioinformatics and the EMBI the European Bioinformatics Institute. There are no restrict
Intermediate filament;
INIT_MET 0 0
DOMAIN 1 92
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Structure of the 68-kDa neurofilament expression.";
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Mikoshiba K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Genetics, evolution, and expression neurofilament protein: isolation of a cell Biol. 100:843-850(1985).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              J. Biol.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene family.
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Julien J.-P., Meyer D., Flavell D., H
"Cloning and developmental expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=10090;
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Neurofilament triplet L protein (68 kDa neurofilament protein)
(Neurofilament light polypeptide) (NF-L).
                                              ROSITE;
                                                                           [nterPro;
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"Anomalous placement of introns in a member filament multigene family: an evolutionary Mol. Cell. Biol. 6:1529-1534(1986).
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                                                            tam;
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BLOL Chem. 265:19786-19791(1990).

FUNCTION: NEUROFILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, M AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER.

DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FO A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH OTHER NEURONAL COMPONENTS OR IONS.

MISCELLANGOUS: NF-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM TATATEMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM
                                                                                                                                                                                                                                                                                                                     FILAMENTS.
SIMILARITY: BELONGS
                                                                                           MGI:97313;
                                            )0038; filament;
PS00226; IF; 1.
                                                                         97313; Nfl.
IPR001664; IF.
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Rodentia;
                            Coiled coil; Neurone; Glycoprotein.
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a cloned cDNA probe.";
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RESULT 10
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Best Local S
Matches 7
VARIANT CMT2E PRO-332.

VARIANT CMT2E PRO-332.

WEDLIND-20307176; PubMed-10841809;

Mersiyanova I.V., Perepelov A.V., Polyakov A.V., Sitniko

Mersiyanova I.V., Perepelov A.V., Polyakov A.V., Sitniko

Mersiyanova I.V., Pertin A.N., Evgrafov O.V.;

Padali E.L., Oparin R.B., Petrin A.N., Evgrafov O.V.;

"A new variant of Charcot-Marie-Tooth disease type 2 is

result of a mutation in the neurofilament-light gene.";

Am. J. Hum. Genet. 67:37-46(2000).

-i- FUNCTION: NEUROFILAMENTS USUALLY CONTAIN THREE IF PR

AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURO.
                                                                                                                        SEQUENCE OF 1-10 FROM N.A.

MEDIJINE-9423564; PubMed-8180132;

Pospelov V.A., Pospelova T.V., Julien J.-P.;

*AP-1 and Krox-24 transcription factors activate the light gene promoter in P19 embryonal carcinoma cells.

Cell Growth Differ. 5:187-196(1994).
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                                                                                                                                                                                                                                             Julien J.-P.,
Mushynski W.;
                                                                                                                                                                                                                                                   SEGUENCE FROM N.A.
MEDLINE-87214213; PubMed-3034332;
Julien J.-P., Grosveld F., Yazdanbaksh
                                                                                                                                                                                                                                                                                                                                                      NFL_HUMAN STANDARD; PRT; 543 AA. P07196; Q16154; O1 APR-1988 (Rel. 07, Created) 01-APR-1988 (Rel. 07, Last sequence update) 16-OCT-2001 (Rel. 40, Last annotation update) 16-OCT-2011 (Rel. 40, Last annotation update) Neurofilament triplet L protein (68 kDa neurofilament (Neurofilament light polypeptide) (NF-L).
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Mammalia; Eutheria;
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illarity 100.0%;
Conservative 0
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Primates;
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COIL 1B.

LINKER 12.

COIL 2A.

LINKER 2.

COIL 2A.

TAIL, SUBDOMAIN A.

TAIL, SUBDOMAIN B (ACIDIC).

TAIL, SUBDOMAIN B (ACIDIC).

O-LINKED (GLONAC) (BY SIMILARITY).

O-LINKED (GLONAC) (BY SIMILARITY).

EPITOPE (RECOGNIZED BY IF-SPECIFIC MONOCLONAL ANTIBODY).

Y -> I (IN REF. 1).

Y -> I (IN REF. 1).

Y -> K (IN REF. 1).

N -> H (IN REF. 1).

R -> A (IN REF. 1).
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   USUALLY CONTAIN THREE IF PROTEINS: L, M IN THE MAINTENANCE OF NEURONAL CALIBER.
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Pred.
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filament
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RESULT 11
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Matches 7
                 NFL_XENLA STANDARD; PRT; 5
p35616;
01-JUN-1994 (Rel. 29, Created)
01-JUN-1994 (Rel. 29, Last sequence up
16-OCT-2001 (Rel. 40, Last annotation
Neurofilament triplet L protein (Neuro
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CARBOHYD
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                                                                                                                                                                                                                                                                SITE
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EMBL; S70309; AAD14057.1;
PIR; S07144; S07144
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MIM; 162280;
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Xenopus laevis (African clawed frog).
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DISEASE: DEFECTS IN NEFL ARE A CAUSE OF CHARCOT-MARIE-TOOTH DESEASE TYPE ZE (CMT2E).

MISCELLANDOUS: NP-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM
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7; Conser
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LINKER 2.
COIL 2B.
TAIL, SUBDOMAIN A.
TAIL, SUBDOMAIN A.
TAIL, SUBDOMAIN B (ACIDIC).
O-LINKED (GLONAC) (BY SIMILARITY).
O-LINKED (GLONAC) (BY SIMILARITY).
EPITOPE (RECOGNIZED BY IF-SPECIFIC
MONOCLONAL ANTIBODY).
Q -> P (IN CMT2E).
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7A0F1ADD5BED22F6 CRC64;
                    (Neurofilament
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OC Man
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Best Local :
                                     NFL_PIG STANDARD; PRT; 548 AA. P02547; 21-JUL-1986 (Rel. 01, Created) 01-OCT-1996 (Rel. 34, Last sequence update) 16-OCT-2001 (Rel. 40, Last annotation update) Neurofilament triplet L protein (68 kDa neurofilament (Neurofilament light polypeptide) (NF-L).
          Eukaryota,
                                                                                                                                                                                                                                                                                               DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                           DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                            DOMAIN
DOMAIN
 Mammalia;
                     Sus scrofa (Pig).
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DOMAIN
                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL;
PIR; E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Charnas L.R., Szaro B.G., Gainer H.; "Identification and developmental expression eweight neuronal intermediate filament protein
                                                                                                                                                                                                                                                                                     DOMAIN
                                                                                                                                                                                                                                                                                                                                  DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the European Bioinformatics Institute. The use by non-profit institutions as long modified and this statement is not removed.
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                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPRO01664; IF.
Pfam; PF00038; filament; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            entities requires a license agreement (See http://www.isb-sib.or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Xenopodinae; Xer
NCBI_TaxID=8355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                        217
                                                                                                                                                                                                                                                                                                                                                                                                                                    Intermediate
                                                                                                                                                                                             ب
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Neurosci. 12:3010-3024(1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FUNCTION: NEUROFILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, NAND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER.
MISCELLANGOUS: NF-L IS THE MOST ABUNDANT OF THE THREE
NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPTHELIAL
INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM
                                                                                                                                                                                            LKKVHEE 7
                                                                                                                                                                        LKKVHEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY
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                                                                                                                                                                                                                 Similarity
7; Conserv
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 Eutheria;
           Metazoa;
                                                                                                                                                                                                                  Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                    filament; Coiled
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Chordata; Craniata; Vertebrata;
Cetartiodactyla; Suina; Suidae;
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LINKER 12.
COIL 2A.
LINKER 2.
COIL 2B.
TAIL, SUBDOMAIN F
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LINKER 1.
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Pred. No.
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76D911B896E97201 CRC64;
                                                                                                                                                                                                                                                                                  GLU-RICH.
                                                                                                                                                                                                                                                                                                                                                                                                                        HEAD
                                                                                                                                                                                                                                                                                                                                                                                                                                 coil; Neurone.
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                                                                                                                                                                                                                                     Length 544;
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         Euteleostomi,
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in Xenopus
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RESULT 13
NFL_BOVIN
   OCCUPATOR
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21-JUL-1986
01-NOV-1997
16-OCT-2001
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CARBOHYD
CARBOHYD
 Bos taurus
Eukaryota;
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SEQUENCE
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PROSITE;
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DOMAIN
                                    NEFL.
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"The complete amino acid sequence
neurofilament protein (NF-L).";
FEBS Lett. 182:475-478(1985).
                                                 protein).
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                                                                                                                                                                                                                                                                      221
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Intermediate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Geisler N., Kaufmann E., Fischer S., Plessmann U., "Neurofilament architecture combines structural printermediate filaments with carboxy-terminal extensions."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE-85154583; PubMed-3920075;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=9823;
[1]
                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                        1 LKKVHEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        size between triplet proteins.";
BO J. 2:1295-1302(1983).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FUNCTION: NEUROPILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, M AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER. DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FOR A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH OTHER NEURONAL COMPONENTS OR IONS.

MISCELLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM
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                                                                                                                                                                                                                                                                      LKKVHEE
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                                                                                                                                                              P79127;
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                                                                  16 (Rel. 01, Created)
17 (Rel. 35, Last sequ.
11 (Rel. 40, Last anno-
lent triplet L protein
ment light polypeptid
 (Bovine)
Metazoa;
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                                                                                                                                                                           STANDARD;
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61940 !
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                                                                      polypeptide)
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E., Fisc
                                                                                   Last sequence update)
Last annotation update)
L protein (68 kDa neurofilament
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LINKER 1.

COIL 1B.

LINKER 1.

COIL 2A.

LINKER 2.

COIL 2B.

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Pred. No.
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 Craniata;
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Vertebrata;
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                                                                    (Micro
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ral principles of
extensions increasing
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                                                                  glutamic
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Euteleostomi;
                                                                    acid-rich
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RESULT 14
NFL_COTJA
ID NFL_C
AC Q0291
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Best Local
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  NFL_COTJA
Q02916;
                                                                                                                                                           CONFLICT
CONFLICT
SEQUENCE
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DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                               EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                    This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EM the European Bioinformatics Institute. There are no restrues by non-profit institutions as long as its content modified and this statement is not removed. Usage by and entitles requires a license agreement (See http://www.isb-sor send an email to license@isb-sib.ch).
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DOMAIN
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DOMAIN
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Pfam; PF00038; filament; 1.
PROSITE; PS00226; IF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hill W.D., Zhang L., Submitted (FEB-1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Isobe T., Okuyama T.;
"Brain micro glutamic acid-rich protein is the C-terminal endpiece
"Brain micro glutamic acid-rich protein as determined by the primary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
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MEDLINE-85154567; PubMed-3884373;
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                                                                                                                                                                                                                    DOMAIN
                                                                     222
                                                                                          1 LKKVHEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FUNCTION: NEUROFILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, MAND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER.

AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER.

DOMAIN: THE EXTRA AND HIGH CHARGE DENSITY THAT DISTINGUISH

THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT

PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FO
A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH

OTHER NEURONAL COMPONENTS OR THE MISCHLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE

NEUROFILAMENT PROTEINS AND, AS THE OTHER NONSPITHELIAL

INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY
                                                                                                                                                                                                                                                                                                                                                                                     A02964; QFBO
                                                                     LKKVHEE
                                                                                                                                                                                                                                                                                                                                                                                                 U83919; AAB41543.1;
                                                                                                               7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              182:389-392(1985).
                                                                                                                Conservative
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125
125
234
272
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                                                                                                                                                                                                                                                                                                                                           lament;
             STANDARD;
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COIL 1B.
LINKER 12.
COIL 2A.
LINKER 2.
COIL 2B.
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                                                                                                                           Score 36;
Pred. No.
             PRT;
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BY SIMILARITY.
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                                                                                                                                     Length 554;
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tent is in
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L outstation -
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16-OCT-2001
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J. Cell Biol. 121:387-395(1993).

J. Cell Biol. 121:387-395(1993).

- FUNCTION: NEUROFILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, M
- I- FUNCTION: NEUROFILAMENT SUBJECT IN THE MAINTENANCE OF NEURONAL CALIBER.

- I- DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH
- THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT
PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FO
A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH
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"Neurofilament deficiency in quail
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=93224534; PubMed=8468353;
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             1 LKKVHEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER NEURONAL COMPONENTS OR IONS.
DISEASE: NF-L DEFICIENCY CAUSES THE DISORDER QUIVER.
MISCELLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE
NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL
INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC
                                                                                                                                                                                                                                                                                                                                                                                                                                               SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY
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D13222; BAA02503.1;
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a; Chordata; Craniata; Vertebrata; Euteleostomi;
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L protein (Neurofilament light polypeptide) (NF-
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TAIL, SUBDOMAIN B (ACIDIC).
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RESULT 15 DESM_XENLA

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DESM_XENLA STANDARD; PRT; 458 AA. P23239; PC3239; O1-NOV-1991 (Rel. 20, Created) O1-NOV-1991 (Rel. 20, Last sequence update) 16-OCT-2001 (Rel. 40, Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. MEDLINE-90032404; PubMed-2806128;
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SUBUNIT: HOMOPOLYMER.
SUBCELLULAR LOCATION: Cytoplasmic.
SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY.
                                                                                                LKKIHEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FUNCTION: DESMIN ARE CLASS-III INTERMEDIATE FILAMENTS FOUND IN MUSCLE CELLS. IN ADULT STRIATED MUSCLE THEY FORM A FIBROUS NETWORK CONNECTING MYOFIBRILS TO EACH OTHER AND TO THE PLASMA
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Q8TCR7
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4 arabidopsis
7 gallus gall
5 gallus gall
4 gallus gall
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caenorhabdi
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01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
Mutant desmin CSM-7 (Mutant desmin CSM-6) (Fragment
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Park K.-Y., Dalakas M.G., Goebel H.H., Ferrans V.J., Sen
Litvak S., Takeda K., Goldfarb L.G.;

Submitted (SEP-1999) to the EMBL/GenBank/DDBJ databases.
EMBL; AF189281; AAG43450.1; -.

EMBL; AF189280; AAG43491.1; -.

InterPro; ITR001664; IF.

Pfam; PF00038; filament; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
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Mammalia; Eutheria;
NCBI_TaxID=9606;
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                                                                                                                                                                                                                                   1 LKKVHEE 7
||||||
| 46 LKKVHEE 52
                                                                                                                                                                                                                                          46
                                                                                                                                                                                                                                                                                                                                                                     / Match 100.0%;
Local Similarity 100.0%;
les 7; Conservative (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         73 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8537 MW;
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          Created)
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                                                                          PRT;
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Pred. No. 4.
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                                                                          386
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RESULT
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Best Local
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Best Local Similarity 100
Matches 7; Conservative
        073587;
073587;
01-AUG-1998
01-NOV-1998
01-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                          073665; PRELIMINARY; 073665; O1-AUG-1998 (TrEMBLrel. (01-AUG-1998 (TrEMBLrel. (01-DEC-2001 (TrEMBLrel.))
                                                                                                                                                                                                                  "Partial sequence of chicken desmin.";
Submitted (MAR-1998) to the EMBL/GenBank/DDBJ databases.
-!- SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY.
EMBL; ABO11672; BAA25132.1; -.
InterPro; IPR001664; IF.
Pfam: PF00038; filament; 1.
                                                                                                                                                                                                    Coiled coil; Intermediate filament.
                                                                                                                                                                                                                                                                                                                                              Desmin (Fragment).
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chor
                                                                                                                                                                                                               PROSITE;
                                                                                                                                                                                                                                                                                       STRAIN-WHITE LEGHORN; TISSUE-MUSCLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hypothetical protein.
NON_TER 1
SEQUENCE 386 AA; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wambutt R., Heubner D., Mew Submitted (MAR-2002) to the EMBL; AL713644; CAD28456.1;
                                                                                                                                                                                           NON_TER
                                                                                                                                                                                                                                                                                                                                       Archosauria; Aves;
                                                                                                                                                                                                                                                                                                                     NCBI_TaxID-9031;
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TISSUE-AMYGDALA;
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01-JUN-2002 (TremBlrel.
Hypothetical 43.8 kDa pr
DKFZP761K0922.
                                                                                             222 LKKVHEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID-9606;
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                                                                                                                                            Local
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448 AA;
       (TrEMBLrel. (TrEMBLrel. (TrEMBLrel.)
                                             PRELIMINARY;
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llarity 100.0%;
Conservative (
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51664 MW;
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Neognathae;
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the EMBL/GenBank/DDBJ
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Last annotation update)
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Pred. No.
                                              PRT;
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Pred. No.
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J databases.
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X MEDLINE-99359868; PubMed-10430757;

X MEDLINE-99359868; PubMed-10430757;

A Li D.X., Tapsott T., Gonzalez O., Burch P.E., Quinones M.A.,

A Zoghbi W.A., Hill R., Bachliski L.L., Mann D.L., Roberts R.;

ET "Desmin Mutation Responsible for Dilated Cardiomyopathy.";

L Circulation 100:461-464(1999).

C -1- SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY.

DR EMBL; AF137053; AAF14400.1; -.

DR InterPro; IPR001664; IF.

DR Pfam: pF00038; filament; 1.

DR PROSITE; PS00226; IF; 1.

CO11ed co11; Intermediate filament.

KW Co11ed co11; Intermediate filament.
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Best Local s
Matches 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 desmin in the shark Scyliorhinus stellaris.";

RI Submitted (NOV-2000) to the EMBL/GenBank/DDBJ databases.

C -!- SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY

REMBL; Y15064; CAA75347.1; -.

REMBL; AJ304374; CAC83054.1; -.

RINTERPRO; IPRO01664; IF.

R Pfam; PF00038; filament; 1.

R PROSITE; PS00026; IF; 1.

W CC11ed co11; Intermediate filament.

SEQUENCE 455 AA; 52230 MW; B330A2FCF895BCE9 CRC64;
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Best Local Similarity
Matches 7; Conserv
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01-MAY-2000
01-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
NCBI_TaxID=9606;
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Scyllorhinus stellaris.
Eukaryota; Metazoa; Chordata;
Elasmobranchii; Galeomorphii;
Scyllorhinidae; Scyllorhinus.
239
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                      1 LKKVHEE
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LKKVHEE
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                                                                                   Similarity
7; Conserv
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470 AA;
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                                                                                 Conservative
245
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Schultess J.,
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EMBL/GenBank/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                1B5D9EAE51FBB319 CRC64;
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Galeoidea; Carcharhiniformes;
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Matches 7
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Q8TCX2;
O1-JUN-2002 (T
O1-JUN-2002 (T
O1-JUN-2002 (T
Mutant desmin.
   Homo sapien
Eukaryota;
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01-JUN-2002
01-JUN-2002
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01-MAR-2001
01-JUN-2001
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Q9H319;
                                                                                                                                                                                                                                                                                                                                                         "Novel desmin mutation causing complete disruption of the fillement network.";
Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases EMBL; AF487828; AAL99078.1;
SEQUENCE 470 AA; 53561 MW; BB51286FE75605DF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted (JUL-1999) to the EMBL; AF167579; AAG41217.1; InterPro; IPR001664; IF. Pfam; PF00038; filament; 1. VARIANT 406 406
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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Eukaryota; Metazoa;
Mammalia; Eutheria;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=9606;
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                    (Human).
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Q18665;
Q1-NOV-1996 (TIEMBLIEL 0
Q1-JAN-1998 (TIEMBLIEL 0
Q1-DEC-2001 (TIEMBLIEL 1
Q47D12.5 protein.
                     SEQUENCE
                                                                               Caenorhabditis elegans.
Eukaryota; Metazoa; Nematoda;
Rhabditidae; Peloderinae; Caer
    Gajadsty
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Goudeau B., Dagvadorj A., Rodrigues-Lima F., Nedellec P. Casteras-Simon M., Perret E., Langlois S., Goldfarb L., Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases. EMBL; AF486807; AAL93205.1; -. SEQUENCE 470 AA; 53504 MW; 1B5C44024DE11869 CRC64;
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hum. Mutat. 18:388-396(2001).
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01-JUN-2002 (TrEMBLrel.
01-JUN-2002 (TrEMBLrel.
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                                                           NCBI_TaxID=6239;
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Eukaryota; Metazoa; (
Mammalia; Eutheria; )
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NCBI_TaxID=9606;
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Arabidopsis thaliana (Mouse-ear cress).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eveurosids II; Brassicales; Brassicaceae; Arabidopsis.
NCBI_TaxID=3702;
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Q8UWF1;
Q1-MAR-2002
Q1-MAR-2002
Q1-JUN-2002
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SEQUENCE
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Genome Strating biology.";
Science 282:2012-2018(1998).
Science 282:2012-2018(1998).
EMBL; 269902; CAA93763.1; -...
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                                                                                                                                                                                                                                                                                                                                                                       1 LKKVHEE 7
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6; Conserv
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459 1
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52098 MW;
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85.7%;
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85.7%;
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Last sequence update)
Last annotation update)
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Pred. No.
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Last sequence up
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
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38;
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 459;
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                                              eudicots;
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RESULT
ID 1977
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AC 099
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DT 011
DT 011
DT 011
DT 011
DT 01

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RP SEQUENCE FROM N.A.;

STRAIN-CV. COLUMBIA;

RX MEDLINE-20083487; PubMed-10617197;

RA Lin X., Kaul S., Rounsley S.D., Shea T.P., Benito M.-I., Town C.D.,

RA Fujli C.Y., Mason T.M., Bowman C.L., Barnstead M.E., Feldblyum T.V.,

RA Fujli C.R., Ketchum K.A., Lee J.J., Ronning C.M., Koo H., Moffat K.S.,

RA Cronin L.A., Shen M., Vanaken S.E., Umayam L., Tallon L.J., Gill J.E.,

RA Adams M.D., Carrera A.J., Creasy T.H., Goodman H.M., Somerville C.R.,

RA Copenhaver G.P., Preuss D., Nierman W.C., White O., Eisen J.A.,

RT "Sequence and analysis of chromosome II of Arabidopsis thallana.";

RT "Sequence and analysis of chromosome II of Arabidopsis thallana.";

RT Nature 402:761-768(1999).

DR EMBL; AC002505; AAC14505.1; -

SO SEQUENCE 807 AA; 89294 MW; F83F0655E1371472 CRC64;

O: Gaps
RESULT 14
Q91355
ID Q9135
AC Q9135
AC Q9135
DT 01-NC
DT 01-JU
DT 01-JU
DE Ventr
OS Gallu
OC Eukar
OC Archo
OC Gallu
OX NCBI_
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Best Local
                            01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-NOV-1996 (TrEMBLrel. 17, Last annotation update)
01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
Ventricular myosin heavy chain 1 (Fragment).
Gallus gallus (Chicken).
Gukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Neognathae; Galliformes; Phasianidae; Phasiani
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NON_TER
SEQUENCE
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Q91355;
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01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
Myosin heavy chain (Fragment).
Gallus gallus (Chicken).
Gukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasiani
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Camoretti-Mercado B., Dizon E., Jakovcic S., Zak R., "Differential expression of ventricular-like myosin he in developing and regenerating avian skeletal muscles Cell. Mol. Biol. Res. 39:425-437(1993).

EMBL; S70443; AAB30704.1; ...
InterPro; IPR002928; Myosin_tail.
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Q91377;
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MEDLINE-94227840; Pubmed-8173588;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 LKKVHEE : | | | | |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             205 LKKIHEE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
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85.7%;
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RESULT 15
Q9IBDA
O99BD
AC Q9IBD
D7 01-0C
D7 01-0C
D7 01-0C
D7 01-0C
ATCH
OC GALH
OC GA
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RP SEQUENCE FROM N.A.

RA SIGNENCE FROM N.A.

RA MEDLINE-92038448; PubMed-1936571;

RA Bisaha J.G., Bader D.;

RT "Identification and characterization of a ventricular-specific avian myosin heavy chain, VMHC1: expression in differentiating cardiac and Fr skeletal muscle ";

RT skeletal muscle ";

Dev. Biol. 148:355-364(1991).

DR EMBL; S64689; AAB20271.1; -.

DR InterPro; IPR002928; Myosin_tail.

Pfam; PF01576; Myosin_tail; 1.

Pfam; PF01576; Myosin_tail; 1.
Search completed: November 13, 2002, 13:16:05 Job time: 23.4894 secs
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Best Local S
Matches 6
                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                          PRINTS; PRO0193; MYOSINHEAVY.
PRINTS; PRO0194; TROPOMYOSIN.
PRODOM; PD000355; myosin_head; 1.
SMART; SM00015; IQ; 1.
SMART; SM00242; MYSC; 1.
SMART; SM00242; MYSC; 1.
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Q9IBD4;
Q9IBD4;
Q9IBD4;
Q1-OCT-2000 (TrEMBLrel. 15, Created)
Q1-OCT-2000 (TrEMBLrel. 15, Last sequence update)
Q1-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Q1-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Myosin heavy chain.
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
Gallus.
Gallus.
                                                                                                                     1930 MKKVHEE 1936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR000048; IQ_region.
InterPro; IPR001609; myosin_head.
InterPro; IPR0014009; myosin_terpro; IPR002928; myosin_tail.
InterPro; IPR002533; Tropomyosin.
Pfam; PF00612; IQ; 2.
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STRAIN-WHITE LEGHORN; TISSUE-HEART;
STRAIN-WHITE LEGHORN; TISSUE-HEART;
MEDLINE-20149854; PubMed-10684978;
MEDLINE-20149854; PubMed-10684978;

"Complate sequence and characterization of chick ventricular myosin heavy chain in the developing attia.";
heavy chain in the developing attia.";
Biochim. Biophys. Acta 1490:333-341(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam; PF00063; myosin_head; 1.
Pfam; PF02736; Myosin_N; 1.
Pfam; PF01576; Myosin_tail; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; AB032197; BAJ
HSSP; P08799; 1MND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=9031;
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                                                                                                                                                                                 1 LKKVHEE 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 LKKVHEE 7
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6; Conservative
                                                                                                                                                                                                                                              Conservative
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                                                                                                                                                                                                                                        94.4%; Score 34; DB 13; Length 1937; 85.7%; Pred. No. 2.4e+02; ive 1; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                   95A94F69CD836781 CRC64;
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26.879 Million cell updates/sec
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ALIGNMENTS

Test antigen #3 for spongiform and demyelinating disease diagnosis.

17-OCT-2000 (first entry)

RESULT 1 AAB05927

AAB05927 standard; peptide; 7 AA

Human; cow; myelin; myelin neurofilament; immunogen; antigen; bovine spongiform encephalopathy; BSE; multiple sclerosis; Creutzfeld-Jacob disease; CJD; demyelinating disease; diagnostic test. 02-JUN-2000. WO200031545-A1 Bos taurus. Homo sapiens. (UNLO) KING'S 26-NOV-1998; 25-NOV-1999; COLLEGE 98GB-0025948. 99WO-GB03936

Diagnosing spongiform or demyelinating disease in vertebrates such as bovine spongiform encephalopathy and Creutzfeld-Jacob disease comprises

WPI; 2000-400194/34.

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             The present peptide may be used as a test antigen in a kit for diagnosing spongiform or demyelinating disease in vertebrates, including bovine spongiform encephalopathy (BSE), multiple sclerosis (MS) and creutzfeld-Jacob disease (CJD). Peptides used in the kit are antigenic components of myelin or myelin neurofilaments. Biological samples are assayed for antibodies, especially 19A antibodies, which bind to myelin and/or myelin neurofilaments or an antigenic peptide, such as the present sequence. Any reading in excess of two standard deviations of
                                                                                                                                                                                                                                                      Claim 5; Page 2; 16pp;
                                                                                                                                                                                                                                                                                                             Diagnosing spongiform or demyelinating disease in vertebrates such abovine spongiform encephalopathy and Creutzfeld-Jacob disease comprises assaying a biological sample for myelin and/or myelin neurofilament antibodies
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bovine spongiform er
Creutzfeld-Jacob dis
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Best Local :
                                                                                                                                            The present sequence is a polypeptide encoded by one of a large number of 5' ESTs derived from mRNAs encoding secreted proteins. The 5' ESTs were prepared from total human RNAs or polyA+ RNAs derived from 30 different tissues. EST sequences usually correspond mainly to the 3' untranslated region (UTR) of the mRNA because they are often obtained from oligo-dT primed cDNA libraries. Such ESTs are not well suited for isolating cDNA sequences derived from the 5' ends of mRNAs and even in those cases where longer cDNA sequences have been obtained, the full 5' UTR is rarely included. 5' ESTs are derived from mRNAs with intact 5' ends and can therefore be used to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used in diagnostic, forensic, gene therapy and chromosome mapplig procedures. They are used to obtain upstream regulatory sequences and to design expression and secretion vectors.
                                                                                                    Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New nucleic acid that is a 5' expressed sequence tag (5' EST) for obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and fo: diagnostic, forensic, gene therapy and chromosome mapping procedu
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RESULT 4
AAY20612
Query Match
Best Local Similarity
Matches 7; Conserv
                                                                                                                                                                                         disease, Down's syndrome, myotonic dystrophy, Huntington's disease, multiple sclerosis, alcoholic liver disease, diabetes mellitus type II and many others listed) or susceptibility to these disorders. The method allows a definitive diagnosis of Alzheimer's disease in living patients, at an early stage. It is based on the observation that disease may be caused by mutations in RNA rather than DNA. The invention describes the used of neuronal system RNA molecules, specifically proteins including beta-amyloid precursor protein (beta-App), the microtubule associated proteins Tau and Big Tau, ubiquitin B, apolipoprotein E, microtubule associated easociated protein 2 (MAP2), neurofilament-L, neurofilament-M, neurofilament-F, presenilin I, presenilin II, glial fibrillary acidic protein (GRAP), the cellular tumour antigen p53, B-cell leukemia/lymphoma 2 (bcl-2) proto-oncogene, semaphorin III, HUPF-1, high mobility group
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          caused by, or associated with, an kna morecure control diseases, especially mutation. The method is used to diagnose age-related diseases, especially cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer's cancer and a wide range of neurodegenerative disorders (e.g. Alzheimer'
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                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Diagnosing disease by detecting frameshift mutations in RNA or corresponding protein mutations - used to diagnose cancer and neurological diseases, particularly Alzheimer's disease, and also for treatment and prevention with specific ribozymes or wild-type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Figure 7; 258pp; English
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DB; AAX75758.
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                                                                                                                                                                                                                     The invention relates to primers for synthesising full length cDNA clones. 830 cDNA molecules encoding a human protein have been isolated and nucleotide sequences of 5'- and 3'-ends of the cDNA molecules have been determined. Primers for synthesising the full length cDNA are useful for clarifying the function of the protein encoded by the cDNA. The full length clones were obtained by construction of full length enriched cDNA libraries that were synthesised by the oligo-capping method. The primers enable the production of the full length cDNA easily without any special methods. The present sequence is a polypeptide encoded by a full length human cDNA of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in CD-ROM format directly from EPO.
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11-JAN-2000;
02-MAY-2000;
                         AAG82610;
                                                                                                                                                                                                    Sequence
                                              AAG82610 standard; Protein; 183
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N-PSDB; AAK94387.
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                                                                                                       EALEKQL 333
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su A, Sugiyama
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2000JP-0118774.
2000JP-0183765.
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ma T, Nagai
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                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hayashi K,
K, Kojima
                                                                                                                                                                                                                                                                                                                                                                              sequence listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ishii S,
S, Otsuki
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                                                                                                                                                                                                                                                                                                                                                                               English
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T, Koga
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                                                                                                                                                     Gaps
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RESULT 7
ABB40184
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AC ABB4
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Best Local S
Matches 6
                                     Staphylococcus epidermidis; open antibacterial; gene therapy.
                                                                                                                             Staphylococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   in vaccination. The nucleic acids (I) may be used to produce the S. epidermidis polypeptides (II) via the production of vectors containing them which are used to produce hosts cells which express the polypeptides. The polypeptides (II) (and/or nucleic acids) may then be used to vaccinate subjects and to raise antibodies against the bacteria. The polypeptides may also be used to assay for other inhibitors of their activity and therefore identify compounds that may be used for the treatment of S. epidermidis infections, e.g. endocarditis. AAH53971 to AAH55090 represent specifically claimed S. epidermidis genomic DNA polynucleotide sequences from the present invention. AAH55091 to
                                                                                                                                                                                            24-JUL-2002
                                                                                                                                                                                                                                                          ABP40184;
                                                                                                                                                                                                                                                                                                                ABP40184 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAH55098 represent oligonucleotide sequences and primers which are used in the exemplification of the present invention.

N.B. The present invention specifically claims all the polynucleotide sequences given in the sequence listing of the present specification, however the sequence listing only goes up to SEQ ID NO:4454 so even though sequences are given in the disclosure for SEQ ID NO:4465 to 4472, no sequences are present for SEQ ID NO:4465 to 4464.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAH52304 to AAH53970 represent nucleic acids (I) encoding polypeptide (II), given in AAG81454 to AAG83120, from Staphylococcus epidermidis (II) and (II) can have antibacterial activity and therefore can be use (I) and (II) can have antibacterial activity and therefore can be used.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleic acids encoding polypeptides from Staphylococcus epidermidis, useful for vaccinating against infections, e.g. endocarditis -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Staphylococcus epidermidis vaccination; endocarditis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 18; Page 615; 2188pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kimmerly WJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-NOV-2000; 2000WO-US30782
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S. epidermidis open reading frame protein sequence SEQ ID NO:2314.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (GLAX ) GLAXO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97
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les 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 EALEKOL 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                          FAIEKQL 103
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)B; AAH53460.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           183 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GROUP LTD
                                                                                                                          epidermidis ORF amino acid sequence SEQ ID NO:5029.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                93.8%;
                                                                                                                                                                                                                                                                                                                229
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Pred. No. 3e+0
1; Mismatches
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3e+02;
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                                                                    ORF;
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                                                                 bacterial infection;
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RESULT 8
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                       27-OCT-2000;
24-NOV-2000;
07-MAR-2001;
                                                                                                                                                                               Streptococcus; GAS; GBS; group B streptococcus; Streptococcus agalactiae; group A streptococcus; Streptococcus pyogenes; antibacterial; antilnflammatory; infection; vaccine; meningitis; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antibacterial activity and can be used in gene therapy. The sequences can also be used in the diagnosis and treatment of bacterial infections, particularly S. epidermidis infections. The sequences can be used to screen for compounds able to interfere with the S. epidermidis life cycle or inhibit S. epidermidis infection.

N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from the USPTO web site.
                                                                                                      02-MAY-2002.
                                                                                                                              WO200234771-A2
                                                                                                                                                    Streptococcus agalactiae.
                                                                                                                                                                                                                                   Streptococcus polypeptide SEQ
                                                                           29-OCT-2001; 2001WO-GB04789
                                                                                                                                                                                                                                                               02-JUL-2002
                                                                                                                                                                                                                                                                                         ABP26811;
                                                                                                                                                                                                                                                                                                                   ABP26811 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   frame (ORF) nucleic acid sequences which encode the amino acid sequence in ABP35124 to ABP37960. The S. epidermidis sequences have
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABN90538 to ABN93374 represent Staphylococcus epidermidis open reading frame (ORF) nucleic acid sequences which encode the amino acid sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; SEQ ID 5029; 267pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel isolated nucleic acid encoding a Staphylococcus epidermidis polypeptide, useful for diagnosing and treating bacterial infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Doucette-Stamm LA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Staphylococcus
                                                                                                                                                                                                                                                                                                                                                                                 105 EAIEKQL 111
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08-NOV-1997;
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mes 6; Conserv
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DB; ABN92729.
                       ; 2000GB-0026333.
; 2000GB-0028727.
; 2001GB-0005640.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       229 AA;
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                                                                                                                                                                                                                                                            (first entry)
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97US-064964P
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                                                                                                                                                                                                                                                                                                                   Protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 93.8%;
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Pred. No. 3.7e+02;
1; Mismatches C
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(CHIR-) CHIRON SPA

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Best Local
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Domain
                                                           02-JUN-1997;
                                                                                                                                                                   03-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                        Oryza sativa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OsMADS7; rice; flower development; apical dominance; dwarfism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rice OsMADS7 protein involved in floral development.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the treatment or prevention of infection or disease caused by Streptococcus bacteria, particularly S. agalactiae and S. pyrogenes. Nucleic acids encoding (I) are used to detect Streptococcus in a biological sample. (I) is used to determine whether a compound binds to (I). A composition comprising (I) or a nucleic acid encoding (I), may be used as a vaccine or diagnostic composition. The disease caused by Streptococcus that is prevented or treated may be meningitis. Nucleic acid encoding (I) may be used to recombinantly produce (I) and may be used in gene therapy. Antibodies to (I) are used for affinity chromatography, immunoassays, and distinguishing/identifying
                                                                                                             02-JUN-1998;
                                                                                                                                                                                                                     W09854328-A2
                                                                                                                                                                                                                                                                                                       Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        transgenic plant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a protein (ABP25413-ABP30895) from group B streptococcus/GBS (Streptococcus agalactiae) or group A streptococcus/GAS (Streptococcus progenes), comprising one of 5483 sequences (S1), given in the specification. The proteins have antibacterial and antiinflammatory activity. (I), nucleic acids encoding (I), ABN66044-ABN71526 and antibodies that bind (I) are used in the manufacture of medicaments for
(UNIW ) UNIV WASHINGTON STATE RES FOUND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New Streptococcus protein for the treatment or prevention of infection or disease caused by Streptococcus bacteria, such as meningitis, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAW84049;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAW84049 standard; Protein; 249
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Page 3431; 4525pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for detecting a compound that binds to
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N-PSDB; ABN67442.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 EALEKQL 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            384 AA;
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                                                        9705-0867087.
                                                                                                             98WO-US11278
                                                                                                                                                                                                                                                                                                    /label- MADS-box
95..159
                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                        /label- K-box
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Pred.
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6e+02;
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Best Local
                                            WPI; 200
N-PSDB;
         Gene controlling the flowering time, vector containing the same plants transformed thereby - \ensuremath{\mathbf{T}}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This is the amino acid sequence of rice OSMADS7, as deduced from an isolated cDNA clone (see AAV71740). OSMAD7 is a novel MADS-box gene involved in the control of floral development and apical dominance. OSMADS6 (see AAW84048) and OSMADS8 (see AAW84050) proteins are also disclosed. Expression of OSMADS8 (see AAW84050) proteins are also transgenic plant causes the plant to exhibit at least one phenotype selected from: (1) diminished apical dominance, (ii) early flowering, (iii) altered daylength requirement for flowering, (iv) greater synchronisation of flowering, and (v) relaxed vernalisation requirement, compared to a non-transgenic control plant. Claimed methods of producing such a transgenic plant utilise: (1) OSMADS6, OSMADS7 or OSMADS8 nucleic acids (see AAV71739-41).
                                                                                                                             02-OCT-1997;
                                                                                Ahn GS,
                                                                                                     (UYPO-) UNIV POHANG SCI & TECHNOLOGY.
                                                                                                                                                    02-OCT-1997;
                                                                                                                                                                           06-MAY-1999
                                                                                                                                                                                                   KR99030639-A
                                                                                                                                                                                                                                     Misc-difference
                                                                                                                                                                                                                                                          Misc-difference
                                                                                                                                                                                                                                                                                               Unidentified
                                                                                                                                                                                                                                                                                                                   Plant; flowering time
                                                                                                                                                                                                                                                                                                                                          Plant flowering time control related protein #3
                                                                                                                                                                                                                                                                                                                                                                   05-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                           AA014277;
                                                                                                                                                                                                                                                                                                                                                                                                                 AAO14277 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
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N-PSDB; AAV71740.
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                                            2000-335956/29
DB; AAL44854.
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                                                                               HG,
                                                                                                                           97KR-0050938
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                                                                                                                                                                                                                                    /note=
249
                                                                                                                                                                                                                                                          Location/Qualifiers 228..229
                                                                                                                                                                                                                        /note= "encoded by CTACCA"
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. 6.2e+02;
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RESULT 11
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Matches 6
                                                                                                                                                                                                                                                                             The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The inventional indevelopmental biology and in elucidating cell signalling cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA sequences (ABL01840-ABL16175) and the encoded proteins
                                                                                                                                           Sequence
                                                                                                                                                                              (ABB57737-ABB72072).
The sequence data for this patent did not form specification, but was obtained in electronic fat ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID NO 18954; 21pp + Sequence Listing; English.
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genes from Drosophila
interactions .
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N-PSDB; ABL08157.
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11-JUL-2000; 2000US-0614150
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1 EALEKQL 7
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                                            6; Conserv
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                                                                                                                                           378 AA;
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                                               Conservative
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                                          Score 29; DB
Pred. No. 9.2e
1; Mismatches
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9.2e+02;
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AAR33366
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                                                                                                                              A cis-regulatory element required for virion associated protein VP16 mediated induction of herpes simplex virus 1 (HSV1) immediate early (IE) genes consists of three imperfect repeats of the purine-rich hexanucleotide 5'-CGGAAR-3'. A protein complex capable of avid interaction with the purine-rich repeats (GA repeats) has been identified in soluble preparations of rat liver nucleic. This GA binding protein (GABP) consists of two separable subunits. Applicants have isolated cDNA clones encoding both subunits of GABP and have revealed that one (GABP alpha) is related to the Ets transforming protein, while the other (GABP beta) contains a series of 33-amino acid repeats related in sequence to a variety of proteins. The sequences for GABP-beta-1 and GABP-beta-2 are identical up to nucleotide 1130 except for a three nucleotide insertion (GTA) at posn. 828 of GABP-beta-1.
                                                                                                                                                                                                                                                                                                                                                                                DNA encoding GA binding protein sub-unit - allows investigation of sub-unit sequence motif functions, for control of rapid cell
                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                        Disclosure; Fig 2B1-3; 68pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1993-093998/11.
N-PSDB; AAQ37966.
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VP16 mediated induction.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-AUG-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (CARN-) CARNEGIE INST WASHINGTON
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335 EALQKQL 341
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                          1 EALEKQL 7
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                                                                                                        382 AA;
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                                                                  90.6%;
85.7%;
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                                                                DB 14;
9.2e+02;
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RESULT 13 ABB61082

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RESULT 14
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                                                                                                                                                                                                                            The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from at ftp.wipo.int/pub/published_pct_sequences.
        Drosophila melanogaster
                                                  Drosophila
                                                                   26-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Drosophila; developmental biology; cell signalling; insecticide; pharmaceutical.
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                          pharmaceutical.
                                Drosophila; developmental biology; cell signalling; insecticide;
                                                                                   ABB60358;
                                                                                                   ABB60358 standard; Protein;
                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                Disclosure; SEQ ID NO 10038; 21pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                       New isolated nucleic acid
genes from Drosophila and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Drosophila melanogaster
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N-PSDB; ABL05185.
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11-JUL-2000;
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2000US-0614150.
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RESULT 15
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N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABLIGITG-ABLIGIT), expressed DNA sequences (ABLIGITG-ABLIGIT), expressed DNA sequences (ABLIGITG-ABLIGIT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New isolated nucleic acid genes from Drosophila and interactions -
                                     23-MAR-2000;
11-JUL-2000;
                                                                                           23-MAR-2001; 2001WO-US09231
                                                                                                                                27-SEP-2001
                                                                                                                                                                                                       Drosophila melanogaster.
                                                                                                                                                                                                                                            pharmaceutical.
                                                                                                                                                                                                                                                               Drosophila;
                                                                                                                                                                                                                                                                                                 Drosophila
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                                                                                                                                                                                                                                                                                                                                                                                 ABB62198;
                                                                                                                                                                                                                                                                                                                                                                                                                  ABB62198 standard; Protein; 2439
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11-JUL-2000;
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(PEKE ) PE CORP NY.
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nes 6; Conserv
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DB; ABL04461.
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                                                                                                                                                                                                                                                                                               melanogaster polypeptide SEQ
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                                                                                                                                                                                                                                                             developmental
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                                     2000US-191637P
2000US-0614150
                                                                                                                                                                                                                                                                                                                                        (first entry)
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2000US-0614150
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                                                                                                                                                                                                                                                             biology;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 detection reagent for detecting for elucidating cell signalling
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Search completed: November 13, 2002, 13:22:07 Job time: 35.7021 secs
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Best Local Similarity 85.7%;
Matches 6; Conservative
                                                                        1 EALEKQL 7
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1964 EALEKEL 1970
                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                   The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                          The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from prosophila. The invention is useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL01840-ABL16175) and the encoded proteins (ABB0737-ABB72072).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; SEQ ID NO 13386; 21pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signalling and cell-cell interactions - {\bf r}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-656860/75.
N-PSDB; ABL06301.
                                                                                                                                                                                                                               2439 AA;
                                                                                                                                                                      Score 29; DB 22; Length 2439; Pred. No. 5.2e+03;
                                                                                                                                                      Mismatches
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Total number of hits satisfying chosen parameters:
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/cgn2_6/ptodata/1/1aa/5B_COMB.pep:*
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               US-08-726-306A-183
US-09-134-001C-5029
US-08-867-087B-15
US-08-867-087B-17
US-08-461-527A-8
5218099-7
US-08-461-558-3
US-08-667-644-3
US-08-667-190A-33
US-08-667-190A-33
US-08-687-087B-32
US-08-687-087B-32
US-08-867-087B-33
US-08-867-087B-33
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551816-4
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US-09-484-644-31
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US-09-484-644-31
US-08-444-644-31
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20.336 Million cell updates/sec
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Sequence 183, App
Sequence 502, Appl
Sequence 2, Appl1
Sequence 3, Appl1
Sequence 8, Appl1
Sequence 17, Papl
Sequence 3, Appl1
Sequence 3, Appl
Sequence 2, Appl
Sequence 3, Appl
Sequence 4, Appl
Sequence 4, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                               APPLICATION NUMBER: US/08/726,306A
FILING DATE: 02-Oct-1996
PRIOR APPLICATION NUMBER: GB 95/20080.4
FILING DATE: 02-Oct-1995
PRIOR APPLICATION NUMBER: GB 95/20080.4
FILING DATE: 02-Oct-1995
PRIOR APPLICATION NUMBER: US 60/009,832
FILING DATE: 01-Jan-1996
ATTORNEY/AGENT INFORMATION:
NAME: Williams, Ph.D., Kathleen M.
REGISTRATION NUMBER: 34,380
REFERENCE/DOCKET NUMBER: 96,048-A (3255/00784)
TELEPHONE: (617) 345-9100
TELEPAX: (617) 345-9111
INFORMATION FOR SEQ ID NO: 183:
SEQUENCE CHARACTERISTICS:
LENGTH: 160 amino acids
STRANDEDNESS: 41016-6
STRANDEDNESS: 41016-6
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US-08-726-306A-183
                                                              US-08-726-306A-183
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      Matches
                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: van Leeuwen, Frederik Willem
APPLICANT: Burbach, Johannes Peter Henri
APPLICANT: Grosveld, Franklin G.
TITLE OF INVENTION: DIAGNOSIS METHOD AND
NUMBER OF SEQUENCES: 189
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDANA
STREET: 1.
CITY: Boston
STATE: MA
COUNTRY: US
TTP: 02111
PEADA
                                                                         LENGTH: 160 am
TYPE: amino ac
STRANDEDNESS:
TOPOLOGY: unkn
MOLECULE TYPE: p
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MEDIUM TYPE: Diskette, 3.50 inch,
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Wordperfect 6.1
CURRENT APPLICATION DATA:
    . Similarity 7; Conserv
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US-08-232-246A-40

US-08-232-246A-40

US-08-232-246A-20

US-08-232-246A-20

US-08-232-246B-27

US-08-230-996A-2

US-08-930-996A-2

US-08-945-24

US-08-940-095-24

US-08-940-095-40

US-08-940-095-80

US-08-940-095-129

US-08-940-095-129

US-08-940-095-132

US-08-940-095-132

US-08-940-095-132
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    Score 32; DB
Pred. No. 21;
D; Mismatches
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40, Appl
46, Appl
46, Appl
3338, Appl
2, Appl
2, Appl
2, Appl
2, Appl
2, Appl
2, Appl
3, Appl
10, Appl
1129, Appl
1129, Appl
1139, Appl
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Result

Pred. No. is the score greater tand is derived

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Score

Query Match

Length

8

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Minimum Maximum

88

seq

length: 0 length: 2000000000

Database

Issued_Patents_AA:*

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2: /cgn2_6/ptodata/1,

3: /cgn2_6/ptodata/1,

4: /cgn2_6/ptodata/1,

5: /cgn2_6/ptodata/1,

6: /cgn2_6/ptodata/1,

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Title: Perfect score:

US-09-856-086-3 32

EALEKQL 7

Scoring table: Sequence:

BLOSUM62 Gapop 10.0 ,

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262574 seqs,

29422922 residues

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US-09-134-001C-5029
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 15, Application  
Patent No. 5990386
GENERAL INFORMATION:
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ENERAL INFORMATION:
APPLICANT: Lynn Doucette-Stamm et al
APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: GTC-007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR FILING DATE: 1997-11-08
PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR FILING DATE: 1997-08-14
NUMBER: OF SEQ ID NOS: 5674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/134,001C CURRENT FILING DATE: 1998-08-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         O ID NO 5029
LENGTH: 229
TYPE: PRT
ORGANISM: Staphylococcus epidermidis
                                                                                                                                                                          OPERATING SYSTEM: MS DOS
SOFTWARE: WORDPERfect 5.1
CURRENT APPLICATION DATA:
                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: U.S. 08/323,449
FILING DATE: October 14, 1994
APPLICATION NUMBER: U.S. 08/485,981
FILING DATE: June 7, 1995
                                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: Disk, 3
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PPLICANT: An, Gynheung
ITLE OF INVENTION: GENES CONTROLLING FLORAL DEVELOPMENT
'TTLE OF INVENTION: AND APICAL DOMINANCE IN PLANTS
HUMBER OF SEQUENCES: 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 105 EAIEKQL 111
                                                                                                                          CLASSIFICATION:
                                                                                                                                    APPLICATION NUMBER: US/08/867,087B FILING DATE: June 2, 1997
                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Klarquist Sparkman Campbell Leigh & ADDRESSEE: Whinston, LLP STREET: One World Trade Center STREET: 121 S.W. Salmon Street STREET: Suite 1600
                                                                                                                                                                                                                                                                                                      COUNTRY: United States of America
ZIP: 97204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 EALEKQL 7
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6; Conserv
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                                                                                                                                                                                                                                                                                                                                            Oregon
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IBM PC compatible
SYSTEM: MS DOS
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85.7%;
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Query Match
Best Local Similarity
Watches 6; Conserve
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US-08-860-886-2
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                                                                  US-08-860-886-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent No.
                                                                                                                                                        TELEX: 66141 PENNIE INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM: Windows Version SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 10036-2811
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                              MOLECULE TYPE:
FRAGMENT TYPE:
                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION: TELEPHONE: 650-493-4935
                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         128 ESLEKQL 134
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                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE: 03-OCT CLASSIFICATION:
                                                                                                                    STRANDEDNESS:
                                                                                                                                                                                                    TELEFAX:
                                                                                                                                                                                                                                           NAME: Coruzzi, Laura A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET:
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                                                                                                         TOPOLOGY:
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                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
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                                                                                                                                                ENGTH:
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                                                                                                                                 amino acid
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              Conservative
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Zur Hausen, Harald
Jan-Helner, Kupper
VENTION: VECTORS AND VIRUSES FOR USE
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internal
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            ; Score 28; DB
; Pred. No. 7.5e
1; Mismatches
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Pred. No.
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                                    Length 1013;
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              Indels
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US-08-491-527A-8
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Patent No. 6132968
                                                                                                                                                                                                              Sequence 8, Application US/08491527A Patent No. 5824483 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (415) 37: TELEFAX: (415) 37: INFORMATION FOR SEQ ID NO: 3: SEQUENCE CHARACTERISTICS: SEQUENCE CHARACTERISTICS: 1014 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: CAITOIL, Peter G.
REGISTRATION NUMBER: 32,837
REFERENCE/DOCKET NUMBER: UALB
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PC COMPATION
COMPUTER: PC COMPATION
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NAMBER: US/09/078,347A
FILING DATE: 13-MAY-1998
CLASSIFICATION: 435
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: unknown
MOLECULE TYPE: protein
                                                                                                       CORRESPONDENCE ADDRESS
                                                                                                                          APPLICANT: Hodges, Robert S.
TITLE OF INVENTION: CONFORM
TITLE OF INVENTION: Library
NUMBER OF SEQUENCES: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: Methods for Quantitating Low Level Modifications of Nucleotide Sequences
                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                            193 EALKKQL 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 220 Montgomery Street, Suite 2200 CITY: San Francisco STATE: California
ZIP: 94306
                               CITY: Palo Alto
STATE: CA
                                                                   STREET:
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                                                                 E: Dehlinger & Agsociates
350 Cambridge Avenue, Suite 250
                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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                                                                                                                                                                                               Houston,
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) 397-8338
                                                                                                                      Conformationally-Restricted Combinatorial Library Composition and Method
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85.7%;
                                                                                                                                                                                             Michael E.
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7.5e+02;
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                                                                                   SEQ ID NO:7:
LENGTH: 94
                                                                                                                                                                                                                                                                                                                                       VIRUS POLYNUCLEOTIDES
NUMBER OF SEQUENCES: 17
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent No.
                                                                                                                                                                                                                                                                                                                                                                                FRY, KIRK
TITLE OF INVENTION: POST-TRANSFUSION, NON-A, NON-B HEPATITIS
Query Match
Best Local Similarity
Matches 5; Conserv
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Best Local 9
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/
FILING DATE: 28-JUN-1989
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                           appLICANT: REYES, GREGORY R.; BRADLEY, DANIEL W.; RABIN, LINDA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ANTI-SENSE: NO ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 79
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 08/260,199
FILING DATE: 15-JUN-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/245,507
FILING DATE: 18-MAY-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                 APPLICATION NUMBER: 350,570; 334,701; 228,334; 215,728; 846,757 FILING DATE: 11-MAY-1989 APPLICATION NUMBER: 334,701 FILING DATE: 06-APR-1989 APPLICATION NUMBER: 228,334 FILING DATE: 04-AUG-1988 APPLICATION NUMBER: 215,728 APPLICATION NUMBER: 215,728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/UB
APPLICATION NUMBER: US/UB-
TILING DATE: 16-JUNE-1995
                                                                                                                    FILING DATE: 06-JUL-1988
APPLICATION NUMBER: 846,757
FILING DATE: 01-APR-1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 71.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
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               Score 27; I
Pred. No. 1.
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Pred. No.
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                                   Length 94;
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                                                                                                              Sequence 3, Application US/08468558
Patent No. 5877280
GENERAL INFORMATION:
APPLICANT: Wetmur, James G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17, Application US/08867087B Patent No. 5990386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: (503) 228-9446
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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                                                                     APPLICANT: Wetmur, James G.
TITLE OF INVENTION: Cloning and Expression of Thermostable
TITLE OF INVENTION: MutS Genes and Proteins and Uses Therefor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 46
TELECOMMUNICATION INFORMATION: (503) 226-7391
                                  NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: U.S. 08/323,449
FILING DATE: October 14, 1994
APPLICATION NUMBER: U.S. 08/485,981
FILING DATE: June 7, 1995
ATTORNEY/AGENT INFORMATION:
NAME: DOW, Alan. E.
REGISTRATION NUMBER: 35,123
REGISTRATION NUMBER: 35,123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: WordPerfect 5.1 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM: MEDIUM TYPE: Disk, 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: GENES CONTROLLING FLORAL DEVELOPMENT TITLE OF INVENTION: AND APICAL DOMINANCE IN PLANTS NUMBER OF SEQUENCES: 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                         128 EQLEKQL 134
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 248 amino acid residues
TYPE: amino acid
TOPOLOGY: linear
                    ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Klarquist Sparkman Campbell Leigh & ADDRESSEE: Whinston, LLP
STREET: One World Trade Center
STREET: 121 S.W. Salmon Street
STREET: Suite 1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                1 EALEKOL 7
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R APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oregon
E: Hamilton, Brook, Smith & Reynolds, P.C. Two Militia Drive
                                                                                                                                                                                                                                                                                                                                                    Conservative
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June 2, 1997
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Pred. No. 3e+0
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CURRENT APPLICATION NUMBER: US/08/676,444A
CURRENT FILING DATE: 1996-07-05
NUMBER OF SEQ ID NOS: 48
SOFFWARE: FRASUSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 853
TYPE: PRT
ORGANISM: Escherichia col1
US-08-676-444-3
US-08-960-190A-33
; Sequence 33, Application US/08960190A
; Patent No. 6232445
; GENERAL INFORMATION:
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US-08-676-444-3
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Best Local Similarity
Matches 6; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity · 100
Matches 6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: CLONING AND EXTITLE OF INVENTION: MUTL GENES AND
                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM.PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, 1
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/08/468,558
FILING DATE: 06-JUN-1995
CLASSIFICATION: 1435
ATTORNEY/AGENT INFORMATION:
NAME: Granahan, Patricia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-861-6240
TELEFAX: 617-861-9540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
                                                                                                                522 ALEKQL 527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             522 ALEKOL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: 1:
                                                                                                                                       2 ALEKQL 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Granahan, Patricia REGISTRATION NUMBER: 32,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 ALEKQL 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            amino acid
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Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                      Wetmur,
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                                                                                                                                                                          Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                      James G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                84.4%; Pr
                                                                                                                                                                      84.4%; Score 27; DB
100.0%; Pred. No. 9.
tive 0; Mismatches
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MSM94-05
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                                                                                                                                                                                      DB 4; I
. 9.9e+02;
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APPLICANT:

Rhode, Peter R. Acevedo, Jorge

Burkhardt, Martin

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Query Match
Best Local Similarity
""" hes 5; Conserv
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                                                              SOFTWARE: F
ORGANISM: Homo sapiens
                                                                                                                                                                         ENERAL INFORMATION:

APPLICANT: Conklin, Darrell C.

APPLICANT: Taft, David W.

TITLE OF INVENTION: Educational Kit and Method Containing No. 6380361el Alpha Helica:

TITLE OF INVENTION: Protein-34

FILE REFERENCE: 99-78
                                                                          NUMBER OF SEQ ID NOS: 41
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                            CURRENT APPLICATION NUMBER: US/09/695,458
CURRENT EILING DATE: 2001-09-25
PRIOR APPLICATION NUMBER: 60/162,623
PRIOR FILING DATE: 1999-10-29
                                                                                                                                                                                                                                                                        equence 26, Appli
atent No. 6380361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
                                                 ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/01
FILING DATE: 29-OCT-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                          37 QALEKEL 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REGISTRATION NUMBER: 33,860
REFERENCE/DOCKET NUMBER: 480
LECOMMUNICATION INFORMATION:
TELEPHONE: 617-523-3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 617-523-6440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: u
ZIP: 02109
                                                                                                                                                                                                                                                                                                                                                                                           1 EALEKQL 7
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ME: Corless, Peter F
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                                                                                                                                                                                                                                                                                          Application US/09695458
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71.4%;
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Pred. No.
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OF USE THEREOF
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-695-458-31
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SOFTWARE: Fas
SEQ ID NO 31
"FNGTH: 64
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Best Local Similarity
Matches 5; Conserv
FILING LAAL.

CLASSIFICATION: BUU
PRIOR APPLICATION DATA:

APPLICATION NUMBER: U.S. 08/323,449

FILING DATE: October 14, 1994

FILING DATE: U.S. 08/485,981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 32, Application US/08867087B Patent No. 5990386
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 31, Appli
Patent No. 6380361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/695,458
CURRENT FILING DATE: 2001-09-25
PRIOR APPLICATION NUMBER: 60/162,623
PRIOR FILING DATE: 1999-10-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Educational Kit and Method Containing No. TITLE OF INVENTION: Protein-34 FILE REFERENCE: 99-78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ENERAL INFORMATION:
APPLICANT: Conklin, Darrell C.
APPLICANT: Taft, David W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Disk, 3
                                                                                                                                       SOFTWARE: WordPerfect 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                              TILE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10 EALQKEL 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19 EALQKEL 25
                                                                                                      APPLICATION NUMBER: US/08/867,087B FILING DATE: June 2, 1997
                                                                                                                                                                        OPERATING SYSTEM: MS DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 EALEKQL 7
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`5; Conserv
                                                                                                                                                                                                                                                                                              Portland
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                                                                                                                                                                                                                                                         Oregon
: United States of America
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                                                                                                                                                                                                                                                                                                                           One World Trade
121 S.W. Salmon
                                                                                                                                                                                                                                                                                                             Suite 1600
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                                                                                                                                                                                         IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                            Klarquist Sparkman Campbell Leigh &
                                                                                                                                                                                                                                                                                                                                                                                                                      Gynheung
ION: GENES CONTROLLING FLORAL DEVELOPMENT
ION: AND APICAL DOMINANCE IN PLANTS
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                                                                                                                                                                                                            3-1/2 inch
                                                                                                                                                                                                                                                                                                                           Center
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Pred. No. 1
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Pred. No. 88;
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; LENGTH: 65 amino
; TYPE: amino acid
; TOPOLOGY: linear
US-08-867-087B-33
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LENGTH: 65 amino acid residues
TYPE: amino acid
TOPOLOGY: linear
US-08-867-087B-32
   Ouery Match
Best Local Similarity 71.
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 71.*
Thes 5; Conservative
                                                                                                                         TELEFAX: (503) 228-9446
INFORMATION FOR SEQ ID NO: 33:
SEQUENCE CHARACTERISTICS:
LENGTH: 65 amino acid residues
                                                                                                                                                                                                                                                                                CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER: U.S. 08/323,449
FILING DATE: October 14, 1994
APPLICATION NUMBER: U.S. 08/485,981
FILING DATE: June 7, 1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08-867-087B-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: (503) 228-944
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                         NAME: DOW, ALAB. E.
REGISTRATION NUMBER: 35,123
REFERENCE/DOCKET NUMBER: 4630-47071
TELECOMMUNICATION INFORMATION:
"""I.EPHONE: (503) 226-7391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      quence 33, Application US/08867087B
                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: MS DOS
SOFTWARE: WORDPEFFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/867,087B
FILING DATE: June 2, 1997
COLESCICATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Disk, 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tent No. 5990386
ENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: GENES CONTROLLING FLORAL DEVELOPMENT TITLE OF INVENTION: AND APICAL DOMINANCE IN PLANTS NUMBER OF SEQUENCES: 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REGISTRATION NUMBER: 35,123
REFERENCE/DOCKET NUMBER: 4630-47071
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PPLICANT:
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:|||:||
34 QALERQL 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Kharquist Sparkman Campbell Leigh & ADDRESSEE: Whinston, LLP STREET: One World Trade Center STREET: 121 S.W. Salmon Street STREET: Suite 1600 CITY: Portland STREET: Oregon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Dow, Alan. E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: United States of America 
ZIP: 97204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ELEPHONE:
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                      81.28;
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   Score 26; DB 2; Length 65; Pred. No. 1.3e+02; 2; Mismatches 0; Indels
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Pred. No. 1.3e+0;
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   0
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Gaps
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Qy 1 EALEKQL 7 |:||:|| Db 34 ESLERQL 40

Search completed: November 13, 2002, 13:18:06
Job time: 11.1277 secs

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Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                    Result
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Maximum DB
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
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O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and is derived by analysis of the total score distribution
                                                                                                                                                                                                                                                                                                                                                                                  Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             seg length: 0 seg length: 2000000000
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                                                                                                                                                                                                                                                                                                                                                                           Query
Match Length
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Gapop 10.0 , Gapext 0.5
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32
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/cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
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/cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep:*
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/cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10_PUBCOMB.pep:*
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US-10-52-56-540

US-09-764-864-1129

US-09-801-368-32

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US-09-815-242-11869

US-09-756-983-19

US-09-766-378A-33

US-09-764-864-1269

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US-09-908-9888-6

US-09-815-242-13437
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22.121 Million cell updates/sec
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6, Appli
13437, A
13656, A
                                                    19, Appl
33, Appl
33411, A
1269, Ap
575, App
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20, Appl
540, App
1129, Ap
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10272, A
13869, A
11081, A
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15, Appl
37915, A
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Sequence 96, Appl	e 89,	е 88, Арр	e 87, App	e 86,	e 85,	e 84,	O	e 10903,	Ø	e 5480,	e 372	38,	7,	Sequence 7, Appli	e 7,	Sequence 7, Appli	7,	e 13938,	e 10179	æ	m-	e 5699,	e 134	e 80	ຸນ

ALIGNMENTS

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PRIOR APPLICATION NUMBER: US 60/218,312
PRIOR EILING DATE: 2000-07-14
NUMBER OF SEQ ID NOS: 21
SOFTWARE: PatentIn version 3.0
SEQ ID NO 12
LENGTH: 29
TYPE: PRT
ORGANISM: Artificial Sequence
                RESULT 2
US-09-905-831-15
; Sequence 15, Application US/09905831
; Patent No. US20020119572A1
; GENERAL INFORMATION:
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; OTHER INFORMATION: dCoil-adIL29 dimeric coiled coil
US-09-905-831-12
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Best Local Similarity
Matches 6; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Jacobson, Joseph
APPLICANT: Schwartz, John
APPLICANT: Schwartz, John
APPLICANT: Hamad, Kimberly
APPLICANT: Zhang, Shuguang
TITLE OF INVENTION: Direct, Externally Imposed Control of Polypeptides
FILE REFERENCE: MLB-086
CURRENT APPLICATION NUMBER: US/09/905,831
CURRENT FILING DATE: 2001-07-13
APPLICANT: Jacobson, Joseph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 60/276,313 PRIOR FILING DATE: 2001-03-16
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US20020119572A1
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85.7%;
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RESULT 3
US-09-864-761-37915
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TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: tCoil-LL29 trimeric bundle
US-09-905-831-15
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                                   PRIOR APPLICATION NUMBER: PCT/US01/00665
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00668
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00663
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-30
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CURRENT FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/276,313
PRIOR FILING DATE: 2001-03-16
PRIOR APPLICATION NUMBER: US 60/218,312
PRIOR FILING DATE: 2000-07-14
NUMBER OF SED ID NOS: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn version 3.0 EQ ID NO 15 LENGTH: 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ILE REFERENCE: Aeomica-X-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PPLICANT: Hanzel, David K.
PPLICANT: Chen, Wensheng
ITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL
ITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ITLE OF INVENTION: Direct, Externally Imposed Control of Polypeptides
                                                                                                                                                                                                                                                                                                                                  OR APPLICATION NUMBER: US 09/632,366
OR FILING DATE: 2000-08-03
OR APPLICATION NUMBER: GB 24263.6
OR FILING DATE: 2000-10-04
OR APPLICATION NUMBER: US 60/236,359
OR FILING DATE: 2000-09-27
OR APPLICATION NUMBER: PCT/US01/00666
OR FILING DATE: 2001-01-30
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                                                                                                                                                                                                                                                      APPLICATION NUMBER: PCT/US01/00664 FILING DATE: 2001-01-30
                                                                                                                                                                                                           APPLICATION NUMBER: PCT/US01/00669 FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: PCT/US01/00667 FILING DATE: 2001-01-30
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ICATION NUMBER: PCT/US01/00661
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Zhang, Shuguang
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, David K.
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85.7%;
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Pred. No.
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; SOPTWARE: FastSEQ for Wil
; SEQ ID NO 63
; LENGTH: 122
; TYPE: PRT
; ORGANISM: Homo saplens
US-09-801-574-63
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US-09-801-574-20
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Best Local S
Matches 6
GENERAL INFORMATION:
APPLICANT: Wang, Peijing Jeremy
APPLICANT: Page, David C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Annom SEQ ID NO 37915
                                               Sequence 20, Application US/09801574 Patent No. US20020081592A1 GENERAL INFORMATION:
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Patent No. US20020081592A1
GENERAL INFORMATION:
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OTHER INFORMATION: EXPRESSED IN HEALTO,
OTHER INFORMATION: EXPRESSED IN BOATE MOTHER INFORMATION: EXPRESSED IN BOATE MOTHER INFORMATION: EXPRESSED IN BRAIN,
OTHER INFORMATION: EXPRESSED IN FETAL JOTHER INFORMATION: EXPRESSED IN BT474,
OTHER INFORMATION: EST_HUMAN HIT: BF37.
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Best Local
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CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: 60/187,518
PRIOR FILING DATE: 2000-03-07
PRIOR APPLICATION NUMBER: 60/261,557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Wang, Peijing Jeremy
APPLICANT: Page, David C.
TITLE OF INVENTION: Reproduction-Specific Genes
FILE REFERENCE: 0399.2007-002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 2001-01-12
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PRIOR APPLICATION NUMBER: US 09/608,408
PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
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PRIOR APPLICATION NUMBER: US 60/234,687
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les 6; Conserv
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N: EXPRESSED IN HEART, SIGNAL = 1.1

N: EXPRESSED IN BONE MARROW, SIGNAL = 1.1

N: EXPRESSED IN BRAIN, SIGNAL = 1.3

N: EXPRESSED IN FETAL LIVER, SIGNAL = 0.99

N: EXPRESSED IN BT474, SIGNAL = 1.3

N: EXPRESSED IN BT474, SIGNAL = 1.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for Windows Version
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Pred. No. 40;
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; LENGTH: 123
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-801-574-20
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APPLICANT: Chen, Jian
APPLICANT: Desnoyers, Luc
APPLICANT: Goddwski, Paul J.
APPLICANT: Goddwski, Paul J.
APPLICANT: Goddwski, Paul J.
APPLICANT: Goddwski, Paul J.
APPLICANT: Smith, Victoria
APPLICANT: Smith, Victoria
APPLICANT: Watanabe, Colin K.
APPLICANT: Wood, William I.
APPLICANT: Langy, Zemin
APPLICANT: APPLICANT: SECRETED AND TRANSMEMBRANE POI
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POI
TITLE OF INVENTION: MCIDS ENCODING THE SAME
FILE REFERENCE: P3430R1C1
CURRENT APPLICATION NUMBER: US/10/052,586
CURRENT FILING DATE: 2002-01-15
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US-10-052-586-540
                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/059263
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059266
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/063120
PRIOR APPLICATION NUMBER: 60/063120
PRIOR FILING DATE: 1997-10-17
PRIOR FILING DATE: 1997-10-24
PRIOR FILING DATE: 1997-10-24
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CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: 60/187,518
PRIOR FILING DATE: 2000-03-07
PRIOR APPLICATION NUMBER: 60/261,557
PRIOR FILING DATE: 2001-01-12
PRIOR FILING DATE: 2001-01-12
NUMBER OF SEQ ID NOS: 90
SOFTWARE: FastSEQ for Windows Version 4.0
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R FILING DATE:
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          APPLICANT: Salama, Sofie
APPLICANT: Sherman, Amir
APPLICANT: Silva, Jeff
APPLICANT: Summers, Eric
TITLE OF INVENTION: Methods for Improving Secondary Metabolite Production in FILE REFERENCE: 109272.147
CURRENT APPLICATION NUMBER: US/09/801,368
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: US 09/487,558
PRIOR APPLICATION NUMBER: US 09/487,558
PRIOR APPLICATION NUMBER: US 09/10-20
PRIOR FILING DATE: 2000-01-19
PRIOR FILING DATE: 2000-01-20
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CURRENT FILING DATE: 2001-01-17
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TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/089653
FILING DATE: 1998-06-17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EALEKQL 7
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                                                                                                                                                                                                                                                                                                                                                                                     32, Application US/09801368
5. US20020128250A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
5; Conserv
SEQ ID NOS: 440
                                                                                                                                                                                                                                                                                Hecht, Peter
Holtzman, Doug
Madden, Kevin
                                                                                                                                                                                                                                Maxon, Mary
Milne, Todd
No. US20020128250Alman,
                                                                                                                                                                                                                Royer, John
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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                                                                                                                                                                                                                                                                                                                                                     Robert
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: 1998-06-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic Acids, Proteins, and Antibodies
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85.7%; Pred. No. 52;
Live 0; Mismatches
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Pred. No. 52;
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US-09-815-242-13869

; Sequence 13869, Application US/09815242

; Patent No. US20020061569A1
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US-09-815-242-10272
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Best Local S
Matches 6
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Best Local Similarity

Matches 6; Conserv
APPLICANT: Haselbeck, Robert APPLICANT: Ohlsen, Kari L. APPLICANT: Zyskind, Judith W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/815,242
CURRENT FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
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APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                       RIOR APPLICATION NUMBER: 60/269,308 PRIOR FILING DATE: 2001-02-16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 770
TYPE: PRT
ORGANISM: Saccharomyces cerevisiae
                                                                                                                                                                    522 ALEKQL 527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   210 EKLEKQL 216
                                                                                                                                                                                           2 ALEKQL 7
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FILING DATE: 2000-05-26
APPLICATION NUMBER: 60/:
FILING DATE: 2000-10-23
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FILING DATE: 2000-12-22
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                                                      INFORMATION:
                                                                                                                                                                                                                                    l Similarity
6; Conserv
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Yamamoto, Robert T.
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Zyskind, Judith W.
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 Kari L.
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100.0%; Pr
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                                                                                                                                                                                                                                 ; Score 27; DB
%; Pred. No. 2.8
0; Mismatches
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2.8e+02;
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                                    FILE REFERENCE: ELITRA.011A
CURRENT APPLICATION NUMBER: US/09/815,242
CURRENT FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR APPLICATION NUMBER: 60/242,578
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                                                                                                                                                                                                                                                                                                                                                                                                                                 -09-815-242-11081
                                                                                                                                                                                                  APPLICANT: Xu, H. Howard
TITLE OF INVENTION: Identification of Essential Genes
TITLE OF INVENTION: Prokaryotes
                                                                                                                                                                                                                                                                                                                          APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari L.
APPLICANT: Zyskind, Judith W.
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11081, Application o. US20020061569A1

Application US/09815242

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Wall, Daniel Carr, Grant J Trawick, John D. Yamamoto, Robert T.

FILING DATE:

2000-10-23

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Query Match
Best Local Similarity
"-+ hes 6; Conserve
                                                                                                                   ; NAME/KEY: VARIANT
; LOCATION: (1)...(855)
; OTHER INFORMATION: Xaa - Any Amino Acid
US-09-815-242-13869
                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
                                                                                                                                                                                                                                                               SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 13869
LENGTH: 855
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PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
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CURRENT FILING DATE: 2001-03-21
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                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Identification of Essential Genes
                                                                                                                                                                                                   ORGANISM: Salmonella typhi FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
2 ALEKQL 7
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Yamamoto, Robert T.
Xu, H. Howard
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Trawick, John
                                        Conservative
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                                  84.4%; Score 27; DB 10;
100.0%; Pred. No. 2.9e+02;
Live 0; Mismatches 0;
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                                                                      Length 855
                                    Indels
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                                  Gaps
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STREET: 130 Water Street

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RESULT 13
US-09-766-378A-33
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SEQ ID NO 19
LENGTH: 31
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Peptides
US-09-756-983-19
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Best Local Similarity
"-+-hes 6; Conserve
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Best Local 9
                                                                                                                                                                                                         Sequence 33,
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                                                                                                                                                                          quence 33, Application US/09766378A tent No. US20020091079A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 09/421,506
PRIOR FILING DATE: 1999-10-19
PRIOR APPLICATION NUMBER: PCT/US99/2466
PRIOR FILING DATE: 1999-10-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS:
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VRIOR FILING DATE: 1998-10-20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTLE OF INVENTION: METHODS FOR ISOLATION, QUANTIFICATIVE OF INVENTION: CHARACTERIZATION AND MODULATION ITLE OF INVENTION: ANTIGEN-SPECIFIC T CELLS
LE REFERENCE: 246/285-CIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PPLICANT: Albani, Salvatore
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                                                                                                                                                                                                                                                                                         23 QALEKEL 29
                                                                                                                                                                                                                                                                                                            1 EALEKQL 7
             TITLE OF INVENTION: SOLUBLE MHC COMPLEXES;
METHODS OF USE THEREOF
NUMBER OF SEQUENCES: 38
CORRESPONDENCE ADDRESS:
ADDRESSEE: Dike, Bronstein, Roberts &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 ALEKQL 7
                                                                            Wong, Hin TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/257,931
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                                                                                                                                                                                                                                                                                                                                                    Similarity 71.4
5; Conservative
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                                                                                                          Acevedo, Jorge
Burkhardt, Martin
Jiao, Jin-an
                                                                                                                                                            Rhode, Peter R.
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                                                                                             Hing C.
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        Bronstein, Roberts & Cushman, LLP
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                                                                                                                                                                                                                                                                                                                                                                   Pred. No. 16;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                Score 26;
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. 2.9e+02;
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                                                                                                                                                                                                                                                                                                                                                                                Length 31;
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PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR FILING DATE: 2000-09-27
PRIOR FILING DATE: 2000-09-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-864-761-33411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; SEQUENCE DESCRIPTION: SEQ ID NO: 33: US-09-766-378A-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 5; Conserv
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Best Local
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                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL 1
FILE REFERENCE: Accmica-X-1
                                                                                                                                                                                                                                                                                                                                                                                                           PPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 33:
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                                       APPLICATION NUMBER: PCT/US01/00666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION: 517-523-3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 08/960,190
FILING DATE: 29-OCT-1997
ATTORNEY/AGENT INFORMATION:
NAME: COILESS, Peter F
REGISTRATION NUMBER: 33,860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/09/766,378A FILING DATE: 19-Jan-2001 CLASSIFFICATION: <UNKNOWN> PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: linear MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                  Hanzel, David K.
Chen, Wensheng
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: MA
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NUMBER: PCT/US01/00667
                       2001-01-30
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Pred. No. 23;
2; Mismatches
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RESULT 15
US-09-764-864-1269

/ Sequence 1269, Application US/09764864

/ Patent No. US20020132753A1

/ GENERAL INFORMATION:
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PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00665
PRIOR FILING DATE: 2001-01-30
PRIOR PRIOR PILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00668
PRIOR APPLICATION NUMBER: PCT/US01/00663
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00662
PRIOR APPLICATION NUMBER: PCT/US01/00661
PRIOR APPLICATION NUMBER: PCT/US01/00661
PRIOR APPLICATION NUMBER: PCT/US01/00670
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: US 09/704, 887
PRIOR APPLICATION NUMBER: US 09/608, 408
PRIOR APPLICATION NUMBER: US 09/704, 203
PRIOR FILING DATE: 2000-09-21
PRIOR PRIOR APPLICATION NUMBER: US 09/704, 203
                                                                                                                                                                                                                                                                                    APPLICANT: Rosen et al.

APPLICANT: ROSEN et al.

TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: P723

CURRENT APPLICATION UNMBER: US/09/764,864

CURRENT FILING DATE: 2001-01-17

Prior application data removed - consult PALM or file wrapper NUMBER OF SEQ ID NOS: 1792

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 1269

LENGTH: 122

TYPE: PRT
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LENGTH: 67
ORGANISM: Homo sapiens FEATURE: FEATURE: NAME/KEY: SITE LOCATION: (94)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids NAME/KEY: SITE
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A INFORMATION: EXPRESSED IN LONG, SIGNAL P. 0.69

JER INFORMATION: EXPRESSED IN LONG, SIGNAL P. 0.82

HER INFORMATION: EXPRESSED IN BRAIN, SIGNAL P. 0.82

THER INFORMATION: EXPRESSED IN PLACEWYN, SIGNAL P. 0.82

THER INFORMATION: EXPRESSED IN PETAL LIVER, SIGNAL P. 0.79

OTHER INFORMATION: EXPRESSED IN HELAD, SIGNAL P. 0.69

OTHER INFORMATION: EXPRESSED IN HELAF, SIGNAL P. 0.79

OTHER INFORMATION: EXPRESSED IN HELAF, SIGNAL P. 1.5

OTHER INFORMATION: EXPRESSED IN HELAFT, SIGNAL P. 1.5

OTHER INFORMATION: EXPRESSED INFORMATION: EXPRESS
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les 6; Conserv
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; LOCATION: (107)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids US-09-764-864-1269
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Query Match
Best Local Similarity
6; Conserve Conservative 81.2%; 85.7%; 0; Mismatches Score 26; DB Pred. No. 63; DB 10; Length 122; Indels 0 Gaps

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Qy 1 EALEKQL 7 | ||||| 28 ENLEKQL 34

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Search completed: November 13, 2002, 13:40:18 Job time: 5.90881 secs

Sequence Sequence Sequence Sequence

57, Appl 3132, Ap 34475, A

Sequence Sequence

125495, 194465, A 18635, A 30712, A

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Title:
Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 200000000
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Gapop 10.0 , Gapext 0.5
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                      US-09-540-209B-8600
US-09-834-366-15179
US-00-197-673-15179
US-09-791-537-14762
US-09-791-537-125497
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                   Sequence
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                   8600, Ap
15179, A
15179, A
14762, A
92908, A
125497,
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US-09-540-209B-8600
Sequence 8600, Application US/09540209B
GEMERAL INFORMATION:
APPLICANT: GAIY L. Breton
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO BACTEROIDES
FILE REFERENCE: 2709 1001-001
CURRENT APPLICATION NUMBER: US/09/540,209B
CURRENT APPLICATION NUMBER: US/09/540,209B
CURRENT APPLICATION NUMBER: US/09/540,209B
CURRENT FILING DATE: 2000-04-04
NUMBER OF SEQ ID NOS: 10444
SEQ ID NO 8600
LENGTH: 111
ORGANISM: B.fragilis
US-09-540-209B-8600
RESULT 2
US-09-834-366-15179
; Sequence 15179, Application US/09834366
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| EALEKQL 101
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1 US-09-791-537-18635
1 US-09-791-537-120110
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2 US-60-212-655-422
7 US-60-215-161-5367
8 US-09-450-969-6936
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Sequence 100110, A
Sequence 120110, A
Sequence 1113, Ap
Sequence 422, App
Sequence 828, Ap
Sequence 2314, Ap
Sequence 5367, Ap
Sequence 6336, Ap
Sequence 17119, A
Sequence 3944, Ap
Sequence 6434, Ap
Sequence 6434, Ap
Sequence 1170, Ap
Sequence 1486, Ap
Sequence 1457, Ap
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Sequence 1457, Ap
Sequence 1457, Ap
Sequence 7601, Ap
Sequence 7601, Ap
Sequence 7601, Ap
Sequence 34107, A
Sequence 18954, A
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Database

Result

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Gaps

T: Bejanin, Stephane T: Tanaka, Hiroaki

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                                                                    US-09-791-537-14762
                                                                                                                                                                                                                                                                                         ; NAME/KEY: UNSURE
LOCATION: 1
; OTHER INFORMATION: Xaa - Gly, Arg
US-60-197-873-15179
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                                      GENERAL INFORMATION
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; LOCATION: 21
; OTHER INFORMATION: Xee - Gly, Arg
US-09-834-366-15179
                                                                                                                                                                                                            Query Match 100.0%; Score 32; Best Local Similarity 100.0%; Pred. No. Matches 7; Conservative 0; Mismatch
                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/60/197,873
CURRENT FILING DATE: 2000-04-18
NUMBER OF SEQ ID NOS: 52153
SOFTWARE: Patent.pm
SEQ ID NO 15179
LENGTH: 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15179, Application US/60197873 GENERAL INFORMATION:
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Jobert, Severin
APPLICANT: Giordano, Jean-Y
TITLE OF INVENTION: ESTS an
FILE REFERENCE: 81 US1.PRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Bejanin, Stephano
APPLICANT: Tanaka, Hiroaki
APPLICANT: Dumas Milne Edwards, Jean Baptiste
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PRIOR FILING DATE: 2000-04-18
NUMBER OF SEQ ID NOS: 52153
SOFTWARR: Patent.pm
JEQ ID NO 15179
LENGTH: 141
                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
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CURRENT FILING DATE: 2001-04-13
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TITLE OF INVENTION: ESTs and Encoded Human Proteins.
FILE REFERENCE: 81.US2.REG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Homo sapiens
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                                                                                                                                             49 EALEKOL 55
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Debe, Derek
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Jobert, Severin
                                                 Application US/09791537
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and Encoded Human Proteins.
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; ORGANISM: Rattus norvegicus
US-09-791-537-125497
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US-09-791-537-125497
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US-09-791-537-14762
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SOFTWARE: PatentIn version 3.0
SEQ ID NO 92908
                                                  SEQ ID NO 125497
LENGTH: 542
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                                                                                                                                              APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY N
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
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CURRENT FILING DATE: 2001-02-22
NUMBER OF SEO ID NOS: 153055
SOFTWARE: PatentIn version 3.0
SEQ ID NO 14762
LENCTH: 282
TYPE: PRT
                                                                                                                       CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
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Best Local :
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APPLICANT: Debe, Derek
APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY;
FILE REFERENCE: 261/210
FILE REFERENCE: 261/210
                                                                                                       NUMBER OF SEQ ID NOS: 153055
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TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
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Pred. No. 1.1e+03
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Pred. No.
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Query Match

100.0%;

Score 32;

В

21;

Length 542;

Pred. No. 1.
; Mismatches

Indels

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APPLICANT: KONSTA, NATIONAL APPLICANT: KOJAN, SHINICHI APPLICANT: KOGA, HISASHI APPLICANT: KOGA, HISASHI TITLE OF INVENTION: PRIMERS'FOR SYNTHESIS OF TITLE OF INVENTION: AND THEIR USES FILE REFERENCE: 08335/0122 CURRENT APPLICATION NUMBER: US/09/611,526 CURRENT FILING DATE: 2000-07-07 PRIOR APPLICATION NUMBER: JP 1999-194486 PRIOR FILING DATE: 1999-07-08 PRIOR APPLICATION NUMBER: JP 2000-118774 PRIOR FILING DATE: 2000-01-11 PRIOR APPLICATION NUMBER: JP 2000-183765 PRIOR APPLICATION NUMBER: JP 2000-183765 PRIOR APPLICATION NUMBER: JP 2000-183765 PRIOR FILING DATE: 2000-05-02
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US-10-205-331-57
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SOFTWARE: Pate
SEQ ID NO 3132
LENGTH: 543
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                                NUMBER OF SEQ ID NOS: 4
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TITLE OF INVENTION: Identification and Usé of Molecules Implicated in Pain
FILE REFERENCE: WT.A-0.18199
CURRENT APPLICATION NUMBER: US/10/205,331
CURRENT FILING DATE: 2002-07-24
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SUGIYAMA, TOMOYASU
NAGAI, KEIICHI
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HAYASHI, KOJI
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KAWAI, YURI
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NUMBER OF SEQ ID NOS: 153055
SOFTWARE: Patentin version 3.0
SEQ ID NO 56903
LENGTH: 543
TYPE: PRT
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RESULT 11
US-09-791-537-86802
                                                                                                                                                                                       ; ORGANISM: Mus musculus 
US-09-791-537-56903
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Best Local Similarity
Watches 7; Conserve
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Best Local Similarity
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LENGTH: 543
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Best Local
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CURRENT FILING DATE: 2001-02-22
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CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
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APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME
TITLE OF INVENTION: METHODS OF USE THEREOF
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APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THEE DIMENSIONAL STRUCTURES
TITLE OF INVENTION: METHODS OF USE THEREOF
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                                                             328 EALEKOL 334
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CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: PatentIn version 3.0
SEQ ID NO 125495
LENGTH: 548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: Sus scrofa
US-09-791-537-125495
                                                                                                                                                                                                                                    -09-791-537-94465
Sequence 94465, Application US/09791537
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                             NUMBER OF SEQ ID NOS: 153055
SOFTWARE: PatentIn version 3.0
SEQ ID NO 94465
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Sequence 125495, Application US/09791537
                                                                                 CURRENT APPLICATION NUMBER: US/09/791,537
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09-791-537-86802
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APPLICANT: Debe, Derek
APPLICANT: Danzer, Josep
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'ITLE OF INVENTION: THREE I
'ITLE OF INVENTION: METHOI
'ILE REFERENCE: 261/210
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YPE: PRT
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TLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF
TLE OF INVENTION: METHODS OF USE THEREOF
LE REFERENCE: 261/210
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; ORGANISM: Coturnix coturnix US-09-791-537-30712
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US-09-791-537-30712
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LENGTH: 555
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SOFTWARE: PatentIn version 3.0
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ITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY
ITLE OF INVENTION: METHODS OF USE THEREOF
ILE REFERENCE: 261/210
329 EALEKQL 335
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"LE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY )
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US-10-080-943-4
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Sequence 3, Appli sequence 521, Ap Sequence 5029, Ap Sequence 8, Appli sequence 540, Appli sequence 540, Appli sequence 67, Appli sequence 16, Appli sequence 11, Appli sequence 11, Appli sequence 17, Appli sequence 17, Appli sequence 28, Appli sequence 28, Appli sequence 4, Appli sequence 11, Appli sequence 11, Appli sequence 11, Appli sequence 2, Appli sequence 4, Appli sequence 4, Appli sequence 4, Appli sequence 2, Appli sequence 4, Appli sequence 4, Appli sequence 4, Appli sequence 2, Appli sequence 4, Appli sequence 4, Appli sequence 4, Appli sequence 2, Appli sequence 4, Appli sequence 4, Appli sequence 4, Appli sequence 2, Appli sequence 4, Appli sequence 2, Appli sequence 4, Appli sequence 5, Appli sequence 4, Appli sequence 5, Appli sequence 5, Appli sequence 6, Appl
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US-09-856-086-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 7; Conserv
                                                                                                                                          LENGTH: 103
TYPE: PRT
                                                                                                           ORGANISM: Homo sapiens
                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 EALEKQL 7
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1 EALEKQL 7
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495	490	490	478	408	393	387	347	322	321	319	204	195	195	150	110	85	88	62
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US-10-092-411A-4273	US-10-085-198-148	US-10-085-198-146		US-10-092-411A-4130	US-10-264-237-2785	US-10-240-842-4	•	US-10-120-801-93	US-10-120-801-92	US-10-120-801-28	US-10-092-411A-4517	US-10-264-237-2600	PCT-US02-32850-30	US-10-092-411A-5160	US-09-513-999C-5894	US-09-699-266A-4	US-09-513-999C-7414	US-09-513-999C-6203
Sequence		Sequence	Sequence	Sequence				Sequence	Sequence	Seguence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence
4273, Ap	148, App	146, App	108, App	4130, Ap	2785, Ap	4, Appli	5508, Ap	93, Appl	92, Appl		4517, Ap	2600, Ap	30, Appl	5160, Ap	5894, Ap	4, Appli	7414, Ap	6203, Ap

ALIGNMENTS

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Sequence 3, Application US/09856086
; GENERAL INFORMATION:
APPLICANT: EBRINGER, ALAN
TITLE OF INVENTION: DIAGNOSIS OF DEMYELINATING OR
FILE REFERENCE: 78104.040
CURRENT APPLICATION NUMBER: US/09/856,086
CURRENT FILLING DATE: 2001-07-30
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.1
SEQ ID NO 3
LENGTH: 7
TYPE: PAT
ORGANISM: Homo sapiens, Bos
US-09-856-086-3
                                                                                                                                                                                                                                               Sequence 6211, Application US/09513999C
GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Duclert, A.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags and
FILE AREFERENCE: 59.USZ.REG
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
                                                                                                                                             PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR FILING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 6211
FEWER: 102
NAME/KEY: UNSURE
LOCATION: 90
OTHER INFORMATION: Xaa-Leu or Val
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Pred. No. 3.8e+04;
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                                                                                                                                                                                                                                                                                                              Proteins
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                                                                                                                                  ; OTHER INFORMATION: amino acid sequence of leucine zippers US-10-188-444-8
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                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: GB 9922352.1
PRIOR FILING DATE: 1999-09-21
NUMBER OF SEQ ID NOS: 39
SOFTMARE: FastSEQ for Windows Version 4.0
SEQ ID NO 8
                                                                                                  Query Match
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SEQ ID NO 5029
LENGTH: 229
                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 8, Application US/10188444 GENERAL INFORMATION:
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Matches 7; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/092,411A CURRENT FILING DATE: 2002-03-07 PRIOR APPLICATION NUMBER: US 09/134,001 PRIOR FILING DATE: 1998-08-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR FILING DATE: 1997-11-08
PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR FILING DATE: 1997-08-14
                                                                                                                                                                TYPE: PRT
ORGANIAN: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Lynn Doucette-Stamm et al TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0-092-411A-5029
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                                                                Local Similarity es 6; Conserv
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                              EALEKOL 7
EALEKKL 9
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                                                                Conservative
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85.7%;
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                                                          Score 28; DB Pred. No. 3; 1; Mismatches
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Pred. No.
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Pred. No.
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US-10-125-923A-540
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US-10-103-597A-8
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SEQ ID NO 8
LENCTH: 29
TYPE: PRT
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Matches 6; Conserv
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                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: P3430R1C79
CURRENT APPLICATION NUMBER: US/10/125,923A
CURRENT FILING DATE: 2002-01-15
                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3430R1C79
                                                          PRIOR APPLICATION NUMBER:
                                                                                                                 PRIOR APPLICATION NUMBER: 60/PRIOR FILING DATE: 1997-10-24
                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/063120 PRIOR FILING DATE: 1997-10-24
                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/059266 PRIOR FILING DATE: 1997-09-18
                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 10/052586
PRIOR FILING DATE: 2002-01-15
PRIOR APPLICATION NUMBER: 60/059263
                                                                               PRIOR APPLICATION NUMBER: 6
PRIOR FILING DATE: 1997-10-
                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/062250 PRIOR FILING DATE: 1997-10-17
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PRIOR FILING DATE: 2000-09-18
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Gurney, Austin L.
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Godowski, Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                zhang, Zemin
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                                       1997-10-28
1997-10-28
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85.7%;
                  60/063541
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Pred. No.
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RESULT 8
US-10-120-801-68
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US-10-120-801-69
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Best Local Similarity
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; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 612
; SEQ ID NO 540
; LENGTH: 159
; TYPE: PRT
; ORGANISM: Homo Saplen
US-10-125-923A-540
                                                                                            Query Match
Best Local Similarity /1...
Conservative
                                                                                                                                                                                                                                        EQ. ID NO 69
                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/120,801
CURRENT FILING DATE: 2002-04-11
PRIOR APPLICATION NUMBER: 60/285748
PRIOR FILING DATE: 2001-04-23
PRIOR FILING DATE: 2001-04-24
PRIOR FILING DATE: 2001-04-24
PRIOR PAPPLICATION NUMBER: 60/286292
PRIOR APPLICATION NUMBER: 60/286292
PRIOR FILING DATE: 2001-04-25
PRIOR FILING DATE: 2001-04-25
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APPLICANT
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                                                                                                                                                                                                                        ENGTH:
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LE OF INVENTION: Proteins and Nucleic Acids
E REFERENCE: 21402-340
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                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60 FILING DATE: 2001-05-1
                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/288334 FILING DATE: 2001-05-03
                                                         ESLEKQI 69
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Malyankar, Uriel
Wasserman, Scott
Edinger, Shlomit
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Padigaru, Muralidhara
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                                                                                                                              Score 27; DB
Pred. No. 40;
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Pred. No.
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                                                                                                                                            Length 240;
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Query Match
Best Local Similarity
watches 5; Conserv
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; ORGANISM: human
US-10-120-801-68
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SEQ ID NO 68
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 CURRENT FILING DATE:
                                APPLICANT: Komuves, Laszlo
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
FILE REFERENCE: 21402-340
                                                                                                                                                                                                                                                               APPLICANT:
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PRIOR FILING DATE: 2001-04-23
PRIOR APPLICATION NUMBER: 60/286068
PRIOR FILING DATE: 2001-04-24
PRIOR APPLICATION NUMBER: 60/286292
PRIOR FILING DATE: 2001-04-25
PRIOR FILING DATE: 2001-04-25
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PRIOR FILING DATE: 2001-0
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CURRENT APPLICATION NUMBER: US/10/120,801
CURRENT FILING DATE: 2002-04-11
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                                                                                                                                                                                                                                                                                                                                                                                                                 259 ESLEKQI 265
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                                                                                                                                                                                                                                                                                                              INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          436
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T: Wasserman, Scott
T: Edinger, Shlomit
T: Smithson, Glennda
T: Gunther, Erik
T: Komuves, Laszlo
INVENTION: Proteins and Nucleic Acids Encoding Same
ERENCE: 21402-340
                                                                               Malyankar, Uriel
Wasserman, Scott
Edinger, Shlomit
Smithson, Glennda
Gunther, Erik
                                                                                                                                                                                                                                                                                          Pena, Carol
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                                                                                                                                                                       Topper, James N.
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Spytek, Kimberly
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Padigaru, Muralidhara
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NUMBER: US/10/120,801: 2002-04-11
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; ORGANISM: human
US-10-120-801-67
                                                       SOFTWARE: PatentIn Ver. SEQ ID NO 16
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PRIOR FILING DATE: 2001-04-23
PRIOR APPLICATION NUMBER: 60/286068
PRIOR FILING DATE: 2001-04-24
PRIOR APPLICATION NUMBER: 60/286292
PRIOR FILING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: 60/288334
PRIOR APPLICATION NUMBER: 60/288334
PRIOR FILING DATE: 2001-05-03
PRIOR APPLICATION NUMBER: 60/291241
PRIOR APPLICATION NUMBER: 60/291241
PRIOR APPLICATION NUMBER: 60/291241
PRIOR FILING DATE: 2001-05-16
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SEQ ID NO 67
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                                                                                                     NUMBER OF SEQ ID NOS:
                                                                                                                   PRIOR APPLICATION NUMBER: 60/285609 PRIOR FILING DATE: 2001-04-20
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                        TYPE: PRT
ORGANISM: Homo sapiens
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0-120-801-16
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RIOR FILING DATE: 2001-04-25
RIOR APPLICATION NUMBER: 60/288334
RIOR FILING DATE: 2001-05-03
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1068 ESLEKQI 1074
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RRENT FILING DATE: 2002-04-11
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TLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
LE REFERENCE: 21402-340
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FILING DATE: 2001-09-14
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FILING DATE: 2001-05-16
APPLICATION NUMBER: 60/
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Wasserman, Scott
Edinger, Shlomit
Smithson, Glennda
Gunther, Erik
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Padigaru, Muralidhara
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Spytek, Kimberly
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Pred. No.
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Query Match
Best Local Similarity
~~+~hes 5; Conserv
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PRIOR FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 69
SOFTWARE: PATENTIN VERSION 3.0
SEQ ID NO 19
LENGTH: 30
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
FEATURE:
                                                                                                                                    ; ORGANISM: Homo sapiens US-10-264-237-1810
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US-09-911-261A-19
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                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 60/205,515
PRIOR FILING DATE: 2000-05-19
NUMBER OF SEQ ID NOS: 2876
SOFTWARE: PATENTIN Ver. 3.1
SEQ ID NO 1810
LENGTH: 161
TYPE: PRT
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Best Local Similarity
Matches 5; Conserv
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TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PRI31P1
CURRENT APPLICATION NUMBER: US/10/264,237
CURRENT FILING DATE: 2002-10-04
                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: PCI/US01/16450 PRIOR FILING DATE: 2001-05-18
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ENERAL INFORMATION
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TITLE OF INVENTION: 21nc Finger Domain Recognition Code and Uses Thereof
FILE REFERENCE: 109845.135
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153 EAVERQL 159
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                                1 EALEKQL 7
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                                                                    Conservative
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                                                                                  Score 26;
Pred. No.
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Pred. No. 2.1e+02;
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RESULT 13 US-10-092-411A-3338

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; TYPE: PRT
; ORGANIZM: Staphylococcus epidermidis
US-10-092-411a-3338
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PRIOR APPLICATION NUMBER: US 09/134,001

PRIOR FILLING DATE: 1998-08-13

PRIOR APPLICATION NUMBER: US 60/064,964

PRIOR FILLING DATE: 1997-11-08

PRIOR APPLICATION NUMBER: US 60/055,779

PRIOR PELICATION NUMBER: US 60/055,779

PRIOR PILLING DATE: 1997-08-14

NUMBER: OF SEQ ID NOS: 5676
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Best Local 9
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les 5; Conserv
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: YUE, Henry
: ZEBARJADIAN, Yeganeh
: ZIENG, Wenjin
INVENTION: STRUCTURAL AND CYTOSKELETON-ASSOCIATED PROTEINS
ERENCE: PF-1123 PCT
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                                                                                                                                        SWARNAKAR,
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BOROWSKY, Mark L.
BURRILL, John D.
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                                                                                                          ARREN, Bridget A.
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                                                                                                                                                                           ARQUIS, JOSEPH P.
AMKUMAR, Jayalaxmi
ICHARDSON, Thomas W.
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Soo Yeun
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                                                                                          Junming
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FEATURE:
NAME/KEY: misc_feature
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SOFTWARE: Patentin version 3.1
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PRIOR FILING DATE: 2001-10-11
NUMBER OF COMMENTARY DATE: 2001-10-11
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Bristol-Myers Squibb Company
TITLE OF INVENTION: NOVEL HUMAN LEUCINE-RICH REPEAT DOMAIN CONTAINING PROTEIN, HLL
FILE REFERENCE: D0157 NP
                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/271,078
CURRENT FILING DATE: 2002-10-11
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PRIOR FILING DATE: 2001-10-12
PRIOR APPLICATION NUMBER: US 60/360,681
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PRIOR APPLICATION NUMBER: US 60/346,308
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l as Giu R;Lewis, S.A.; Cowan, N.J. J. Cell Biol. 100, 843-850, 1985 A;Title: Genetics, evolution, and expression of the 68,000-mol-wt neurofilament prote A;Title: Genetics, evolution, and expression of the 68,000-mol-wt neurofilament prote A; Molecule type: mRNA A; Residues: 242-543 <LE2> A; Cross-references: GB: X02165 MOl. Cell. Biol. 6, 1529-1534, 1986
A;Title: Anomalous placement of introns in A;Reference number: A25227; MUID:87064433;
A;Accession: A25227
A;Molecule type: DNA
A;Residues: 1-543 <LEW> C;Species: Mus musculus (house mouse)
C;Datc: 31-Mar-1988 #sequence_revision 30-Sep-1993 #text_change 22-Jun-1999
C;Accession: A55227; A26562; A43772; A41012; I55316
R;Lewis, S.A.; Cowan, N.J. A;Molecule type: mRNA A;Residues: 1-287 A;Cross-references: GB:M25638; NID:g205683; PIDN:AAA41694.1; PID:g205684 C;Superfamily: Cytoskeletal Keratin C;Keywords: coiled coil neurofilament triplet L protein - rat (fragment)
c;Specles: Rattus norwegicus (Norway rat)
C;Date: 27-Jul-1990 #sequence_revision 27-Jul-1990 #text_change 13-Aug-1999
C;Accession: A21762
R;Jullen, J.P.; Ramachandran, K.; Grosveld, F.
Blochlm. Blophys. Acta 825, 398-404, 1985
A;Title: Cloning of a cDNA encoding the smallest neurofilament protein from A;Reference number: A21762; MUID:85252830; PMID:3925999 A; Cross-references: GB:M13016; A; Note: the authors translated 밁 neurofilament triplet L protein - mouse N;Alternate names: 68K neurofilament protein; NF-L(low) protein; type IV IF Š A; Accession: A21762 A; Status: preliminary RESULT A21762 l as Glu Query Match Best Local (Matches 131 EALEKOL 137 1 EALEKQL 7 Local Similarity es 7; Conserv Conservative 100.0%; NID:g200023; PIDN:AAA39810.1; PID:g387492 the codon GGC for residue 5 as Ala, ACA for the codon GGC for residu 0, Score 32; Pred. No. Mismatches a member of PMID:3785173 명 Length 287; the Indels intermediate filament mult 0 ACA for residue Gaps protein the 0

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A; Molecule type: DNA
A; Residues: 1-544 < JUL>
A; Residues: 1-544 < JUL>
A; Cross-references: EMBL: x05608; NID: g1495072; PIDN: CAA29097.
A; Cross-references: EMBL: x05608; NID: g1495072; PIDN: CAA29097.
A; Note: the authors translated the codon ATG for residue 366
R; Pospelov, V.A.; Pospelova, T.V.; Julien, J.P.
Cell Growth Differ. 5, 187-196, 1994
A; Title: AP-1 and Krox-24 transcription factors activate the A; Reference number: 152832; MUID: 94235564; PMID: 8180132
                                                                                                                                                                                                                                            neurofilament triplet L protein - human
N;Alternate names: neurofilament 11ght polypeptide (68K)
N;Contains: Glu-50 brain peptide
C;Species: Homo sapiens (man)
C;Accession: S07144; I52832; A60703
R;Culien, J.P.; Grosveld, F.; Yazdanbaksh, K.; Flavell, D.; Meijer, D.; Mushynski, W.
Biochim. Biophys. Acta 909, 10-20, 1987
A;Title: The structure of a human neurofilament gene (NF-L): a unique exon-intron organi
A;Reference number: S07144; MUID:87214213; PMID:3034332
A;Accession: S07144
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F;94-125/Domain: coil la, alpha-helical rod #status predicted
F;126-138/Region: linker 1
F;139-234/Domain: coil lb, alpha-helical rod #status predicted
F;35-255/Region: linker 12
F;257-272/Domain: coil 2a, alpha-helical rod #status predicted
F;273-281/Region: linker 2
F;282-401/Domain: coil 2b, alpha-helical rod #status predicted
F;282-401/Domain: coil 2b, alpha-helical rod #status predicted
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A; Residues: 1-5, 'Y', 7-8, 'Y', 10-28 <RES>
A; Cross-references: GB: M55423; NID: g200027;
C; Comment: This is the most abundant of the
C; Genetics:
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A; Residues: 52-57 <SIR;
R; Nakahira, K.; Ikenaka, K.; Wada, K.; Tamura, T.
J. Biol. Chem. 265, 19786-19791, 1990
J. Title: Structure of the 68 ND neurofilament gene and A; Reference number: ISS316; MUID:91060592; PMID:2246261
A; Accession: ISS316
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J. Biol. Chem. 266, 18861-18867, 1991
A;Title: Identification of Ser-55 as a major protein kinase A phosphorylation A;Reference number: A41012; MUID:92011653; PMID:1717455
A;Accession: A41012
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A;Residues: 1-5,'Y',7-8,'Y',10-64,'M',66-72,'L',74-98,'D',100-194,'R',196-202,204-239,'Y
A;Cross-references: GB:M20480; NID:g200037; PIDM:AAA39814.1; PID:g200038
A;Note: the authors translated the codon CGC for residue 195 as Ala
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A;Title: Cloning and developmental expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Experimental source: brain R; Julien, J.P. warran
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Status: preliminary; translated
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A;Accession: A43772
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;Superfamily: cytoskeletal keratin 
Keywords: coiled coil; intermediate filament
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Pred. No.
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57;
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                                                                                                                                     PID:g1279504
Asn
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C;Comment: Mammalian neurofilaments usually contain three polypeptides, L, M, and H ke all other intermediate filament proteins: a conserved alpha helical region, whose C;Comment: The amino-terminal headpiece is basic with a high content of hydroxyaming all beta turns; domain b is acidic and rich in glutamic acid and lysine residues. C;Comment: The extra mass and high charge density that distinguish the neurofilament charged scaffolding structure suitable for interaction with other neuronal component; C;Comment: The boundaries of the domains between residues 70-92 and 399-402 are not C;Superfamily: cytoskeletal keratin C;Superfamily: cytoskeletal keratin C;Reywords: colled coll; intermediate filament F;1-70/Domain: head <HED>
                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: protein
A; Residues: 1-82;278-548 <GE2>
A; Note: residue 322 is either lysine or arginine
R; Gonda, Y; Nishizawa, K; Ando, S; Kitamura, S; Minours
Blochem. Blophys. Res. Commun. 167, 1316-1325, 1990
A; Title: Involvement of protein thase C in the regulation
A; Reference number: A34569; MUID: 90211318; PMID: 2108674
A; Accession: A34569
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A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-10 <POS>
A;Cross-references: GB:S70309; NID:g547176; PIDN:AAD14057.1;
- '---- v · Watanabe, T.; Wada, H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Geisler, N.; Kaufmann, E.; Fischer
EMBO J. 2, 1295-1302, 1983
A;Title: Neurofilament architecture
A;Reference number: A90973
A;Accession: A90973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Species: Sus scrofa domestica (domestic pig)
C;Date: 15-Nov-1984 #sequence_revision 28-May-1986 #text_change
C;Accession: A91337; A90973; A34569; A02963
R;Geisler, N.; Plessmann, U.; Weber, K.
FEBS Lett. 182, 475-478, 1985
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C;Keywords: brain; coiled coil; int
F;469-544/Product: Glu-50 peptide #
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J. Blochem. 93, 825-831, 1983
A;Title: Highly acidic proteins from human brain: purification A;Reference number: A60703; MUID:83265667; PMID:6135695
A;Accession: A60703
A;Accession: A60703
A;Molecule type: protein
A;Molecule type: protein
A;Residues: 469-472, 'D', 474 <NOM>
A;Experimental source: Glu-50 brain peptide
A;Note: this acidic protein is named for its greater than fifty
                                                                                                                                                                                                                                                                                                   A;Status: preliminary
A;Molecule type: protein
A;Residues: 9-14;23-29;30-53 <GON>
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A;Cross references: GDB:12027;
A;Map position: 8p21-8p21
A;Introns: 349/3; 391/2; 498/1
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7; Conser
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NiAlternate names: NF-L

NiAlternate names: NF-L

C.Species: Bos primigenius taurus (cattle)

C.Date: 03-Jul-1998 #sequence_revision 10-Jul-1998 #text_change 07-May-1999

C.Accession: JW0094

R.Hashimoto, R.; Nakamura, Y.; Goto, H.; Wada, Y.; Sakoda, S.; Kaibuchi, K.;

Biochem. Biophys. Res. Commun. 245, 407-411, 1998

A.Title: Domain- and site-specific phosphorylation of bovine NF-L by Rho-ass

A.Reference number: JW0094; MUID:98238650; PMID:9571164

A.Molecule type: protein

A.Residues: 1-554 <HAS>
C.; Comment: Domain- and site-specific phosphorylation by Rho-kinase regulates
C.; Superfamily: cytoskeletal keratin
                                                                                                                                                                                                                               A:Experimental source: subsp. japonica, TKP
A:Note: sequence inconsistent with the nucleotide translation
A:Note: sequence extracted from NCBI backbone (NCBIN:129455,
                                                                                                                                                                                                                                                                                          A; Accession: B46024
A; Status: preliminary
A; Molecule type: nucleic acid
A; Residues: 1-556 <OHA>
                                                                                                                                                                                                                                                                                                                                                           C;Accession: B46024
R;Ohara, O.; Gahara, Y.; Miyake, T.; Teraoka, H.; Kitamura, J. Cell Biol. 121, 387-395, 1993
J. Cell Biol. 121, 387-395, 1993
A;Title: Neurofilament deficiency in quail caused by nonsen; A;Reference number: A46024; MUID:93224534; PMID:8468353
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neurofilament-L subunit - quail
neurofilament-L subunit - quail
()Species: Coturnix coturnix (quail)
C;Date: 21-Sep-1993 #sequence_revision 18-Nov-1994 #text_change 12-Apr-1995
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F;137-232/Domain: coil lb, alpha-helical r
F;255-399/Domain: coil 2, alpha-helical r
F;402-548/Domain: tail <TAI>
F;402-442/Region: tail subdomain a
F;443-548/Region: tail subdomain b
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Pred. No. 58;
Mismatches
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Pred. No. 58;
0; Mismatches
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F;720-830/Domain: spectrin/dystrophin repeat homology <SP04>
F;838-936/Domain: spectrin/dystrophin repeat homology <SP05>
F;940-1047/Domain: spectrin/dystrophin repeat homology <SP05>
F;1049-1156/Domain: spectrin/dystrophin repeat homology <SP07>
F;1158-1265/Domain: spectrin/dystrophin repeat homology <SP07>
F;1158-1265/Domain: spectrin/dystrophin repeat homology <SP08>
F;1374-1479/Domain: spectrin/dystrophin repeat homology <SP09>
F;1374-1479/Domain: spectrin/dystrophin repeat homology <SP10>
F;1480-1570/Domain: spectrin/dystrophin repeat homology <SP12>
F;1680-1784/Domain: spectrin/dystrophin repeat homology <SP13>
F;1680-1784/Domain: spectrin/dystrophin repeat homology <SP13>
F;1787-1877/Domain: spectrin/dystrophin repeat homology <SP13>
F;1879-1984/Domain: spectrin/dystrophin repeat homology <SP15>
F;1986-2103/Domain: spectrin/dystrophin repeat homology <SP15>
F;2105-2211/Domain: spectrin/dystrophin repeat homology <SP17>
F;2105-2211/Domain: spectrin/dystrophin repeat homology <SP17>
F;2323-2419/Domain: spectrin/dystrophin repeat homology <SP18>
F;2323-2419/Domain: spectrin/dystrophin repeat homology <SP18>
F;2323-2419/Domain: spectrin/dystrophin repeat homology <SP18>
F;2323-2419/Domain: spectrin/dystrophin repeat homology <SP19>
F;2420-2467/Region: hinge
                                                                                                                                                                                                                                                                                 F;2468-2574/Domain: spectrin/dystrophin F;2576-2683/Domain: spectrin/dystrophin F;25685-2799/Domain: spectrin/dystrophin F;2801-9928/Domain: spectrin/dystrophin F;2930-3037/Domain: spectrin/dystrophin
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F:340-449/Domain: spectrin/dystrophin repeat
F:450-558/Domain: spectrin/dystrophin repeat
F:560-669/Domain: spectrin/dystrophin repeat
F:670-719/Region: hinge
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Residues: 1-3573,'HA',3576-3660 <LEM2>
R;Heilig, R.; Lemaire, C.; Mandel, J.L.
Nucleic Acids Res. 15, 9129-9142, 1987
A;Title: A 230kb cosmid walk in the Duchenne muscular dystrophy gene: A;Reference number: S09071; MUID:88067745; PMID:2825128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: DNA
A; Residues: 222-281 <HEI>
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A;Note: 1869-His, 1885-Arg, and sequences lacking 1171-Met v
R;Lemaire, C: Heilig, R.; Mandel, J.L.
EMBO J. 7, 4157-4162, 1988
A;Title: The chicken dystrophin cDNA: striking conservation
A;Reference number: S02013; MUID:89210800; PMID:3072195
A;Accession: S02013
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Nucleic Acids Res. 16, 11815-11816, 1988
A; Title: Nucleotide sequence of chicken dystrophin cDNA
A; Reference number: S02041; MUID:89098331; PMID:3062582
A; Accession: S02041
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C; Species: Gallus of
C; Date: 07-Sep-1990
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A; Residues: 1-3573, 'HA', 3576-3660
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A; Residues: 1-3660 < LEM>
   Query Match
Best Local S
Matches 7
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   7; Conserv
   100.0%;
llarity 100.0%;
Conservative 0
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gallus (chicken)
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885-Arg, and sequences lacking 1171-Met were also fou
19, R.; Mandel, J.L.
                                                                                                                                leucine zipper motif
leucine zipper motif
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   Score 32; DE
Pred. No. 4.4
); Mismatches
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<SP21>
<SP22>
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J. Bacteriol. 172, 7011-7019, 1990
A:Title: Cloning and sequencing of a bile and Reference number: A37844; MUID:91072253;
A:Accession: D37844
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D37844
baie 19.5k
                                                                                                 R;Mallonee, D.H.; White, W.B.; Hylemon, P.B. J. Bacteriol. 172, 7011-7019, 1990
                                                                                                                                               C;Species: Eubacterium sp.
C;Date: 28-Jun-1991 #sequence_revision
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                                                                                                                                    C; Accession:
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C;Superfamily: beta-alanine-pyruvate transaminase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Reference number: A83650; MUID:20512582; PMID:11058132
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A;Title: Complete genome sequence of the alkaliphilic bact.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            denosylmethionine-8-amino-7-oxononanoate aminotransferase BH0782 [imported] - C;Species: Bacillus halodurans C;Date: 01-Dec-2000 #sequence_revision 01-Dec-2000 #text_change 17-May-2002 C;Accession: F83747
                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Cross-references: GB:AP001509;
A; Experimental source: strain C-
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A;Experimental source: strain COH1; serotype III
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Reference number: 222821
A;Accession: T44652
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-384 <CHA>
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                                Status: preliminary
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Residues: 1-451 <STO>
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Matches 6; Conserv
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      type: D: 1-166
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6; Conserv
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      CMAL
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85.7%;
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85.7%;
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Pred. No.
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1; Mismatches
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                                                                    acid-inducible
; PMID:2254270
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1e+02;
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RESULT 13
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A:Title: MADS box genes expressed in developing inflorescences A:Reference number: Z15292; MUID:97218034; PMID:9065695
A:Accession: T04335
                                                                                                                                                                                                                                                                                                                                                                 MADS box protein - rice
C;Species: Oryza sativa (rice)
C;Date: 23-Apr.1999 #sequence_revision 23-Apr.1999 #text_change
                                                                                               A; Description: may be involved in floral development as a transcription factor C_i Superfamily: transcription factor squa; serum response factor DNA-binding dor C_i Repwords: DNA binding; transcription regulation C_i Repwords: DNA binding; transcription regulation F_i2-57/Domain: serum response factor DNA-binding domain homology C_i2 CRP>
                                                                                                                                                                                                                           A; Molecule type: mRNA
A; Residues: 1-249 <GRE>
                                                                                                                                                                              A; Note: MADS45
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R; Greco, R.; Stagi
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A; Residues: 1-249 <QUL>
A; Cross-references: EMB
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C;Date: 23-Apr-1999 #sequence_
C;Accession: T04307
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                                               Query Match
Best Local
                                 Matches
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                                                                                                                                                                                                                                                                                                                      g1, L.; Colombo, L.; Angenent, G.C.; 253, 615-623, 1997
                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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                                                                                                                                                                                                     EMBL: U31994; NID: g1905929; PIDN: AAB50180.1; PID: g1905930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL:Y15008; PIDN:CAA75241.1
ce: subsp. Japonica, cv. Zhonghua
                                                                                          response factor DNA-binding domain homology
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                                               90.6%;
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                            Score 29; DB
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Pred. No.
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                       DB 2; L., 1.1e+02; 0;
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69;
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128 ESLEKQL

134

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hypothetical protein DKFZp564G2263.1 - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
C;Accession: T17222
R;Duesterhoeft, A.; Lauber, J.; Mewes, H.W.; Gassenhuber, J.; Wiemann, S.
submitted to the Protein_Sequence Database, September 1999
                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
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A;Cross-references: EMBL:AL117418
A;Experimental source: fetal brain; clone DKFZp564G2263
                                                       A; Molecule type: mRNA
A; Residues: 1-284 < DUE>
                                                                                                                                   submitted to the Protein Sequence A; Reference number: Z18727 A; Accession: T17222
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A;Cross-references: GB:AE001171; GB:AE000783; NID:g2688640; PIDN:AAC67060.1; PID:g268864
A;Experimental source: strain B31
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              H70188

conserved hypothetical protein BB0713 - Lyme giseurchete)

Borrelia burgdorferi (Lyme disease spirochete)

revision 13-Feb-1998 #text_change 08-Oct-1999
                                                                                                           A;Status: preliminary
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A;Title: Characterization of two rice MADS box genes that control flowering time.
A;Reference number: Z15253; MUID:97479823; PMID:9339904
A;Accession: T04169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C:Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 11-May-2000
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A; Authors: Smith, H.O.; Venter, J.C.
A; Tille: Genomic sequence of a Lyme disease spirochaete, A; Reference number: A70100; MUID:98065943; PMID:9403685
A; Accession: H70188
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Superfamily: transcription factor squa; serum response factor DNA-binding 12-67/Domain: serum response factor DNA-binding domain homology <SRE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cross-references: EMBL:U78891; NID:g2286110; PID:g2286111
Experimental source: strain M201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Species: Oryza sativa (rice)
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Pred. No. 1.1e+02;
1; Mismatches 0;
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1.1e+02;
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Vugt,
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C; Genetics:
A; Note: DKFZp564G2263.1
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Query Match 90.6%; Score 29; DB 2; Length 284; Best Local Similarity 85.7%; Pred. No. 1.2e+02; Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps Oy :|||||| 7

Db 271 QALEKQL 277

Search completed: November 13, 2002, 13:23:26

Job time: 12.0152 secs

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Result
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Perfect score:
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      of hits satisfying chosen parameters:
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SEQUENCE FROM N.A. TISSUE-Brain; MEDLINE-87064433; PLewis S.A., Cowan N
                                                                                                                                                  MOUSE
                                                                          NFL_MOUSE STANDARD: PRT; 542 AA.
p08551;
01-AUG-1988 (Rel. 08, Created)
01-OCT-1993 (Rel. 27, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Neurofilament triplet L protein (68 kDa neurofilament protein)
(Neurofilament 1ight polypeptide) (NF-L).
NEFL OR NFL.
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EMBL; M25638; AAA41594.1; -.
EMBL; M25981; CAA37931.1; -.
PIR; A21762; A21762.
GlycoSuiteDB; P19527; -.
                                                  Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
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Pred. No.
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O-LINKED (GLCNAC)

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SIMILARITY).

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coil; Neurone; Glycoprotein

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A. J. BIOL. Chem. 265:19786-19791(1990).

Z. -!- FUNCTION: NEUROFILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, M, C. -!- PONCTION: NEUROPILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, M, C. -!- DONAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FORM PROTEINS ARE DUE TO THE TRUCTURE SUITABLE FOR INTERACTION WITH CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH CONTENS OR INCOMPANY OF THE THREE CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH CONTENS OR TONS.

Z. -!- MISCELLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE INTERMEDIATE FILAMENT PROTEINS, AT THE OTHER NOMEDITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM FILAMENTS: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY.
use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lewis S.A., Cowan N.J.;
"Genetics, evolution, and expression of the 68,000-mol-wt neurofilament protein: isolation of a cloned cDNA probe.";
J. Cell Biol. 100:843-850(1985).
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Julien J.-P., Meyer D., Flavell D., Hurst J., Grosveld F.;
"Cloning and developmental expression of the murine neurof
gene family.";
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WARDLINE-20307176; PubMed-10841809;

RA MEDLINE-20307176; PubMed-10841809;

RA MEDLINE-20307176; PubMed-10841809;

RA MESTYROVA I.V., Perepelov A.V., Polyakov A.V., Sitnikov V.F.,

RA METSYROVA I.V., Perepelov A.V., Polyakov A.V., Sitnikov V.F.,

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SEQUENCE FROM N.A.
MEDLINE-87214213; PubMed-3034332;
MEDLINE-87214213; PubMed-3034332;
MEDLINE-87214213; PubMed-3034332;
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P07196; Q16154;
Q1-APR-1988 (Rel. 07, Created)
O1-APR-1988 (Rel. 07, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Neurofilament triplet L protein (68 kDa neurofilament protein)
(Neurofilament 1ight polypeptide) (NF-L)
NEFL OR NFL OR NF68.
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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filament gene family.";
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                                                     MEDIINE-85154583; PubMed-3920075;
Geisler N., Plessmann U., Weber K
"The complete amino acid sequence
neurofilament protein (NF-L).";
FEBS Lett. 182:475-478(1985).
                                                                                                                                                                                                                                                                                                                                                                                    NEFL.
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Mammalia; Eutheria;
NCBI_TaxID=9823;
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EMBL; S70309; AAD14057.1;
PIR; S07144; S07144.
Genew; HGNC:7739; NEFL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DOMAIN
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7; Conserv
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   AND 278-548
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LINKER 1.
COIL 1B.
LINKER 12.
COIL 2A.
LINKER 2.
COIL 2B.
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TAIL, SUBDOMAIN B (ACIDIC).

O-LINKED (GLCNAC) (BY SIMILARITY).

O-LINKED (GLCNAC) (BY SIMILARITY).

EPITOPE (RECOGNIZED BY IF-SPECIFIC
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MONOCLONAL ANTIBODY).
Q -> P (IN CMT2E).
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                                                                                                                   the major
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Sus.
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Best Local
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                                                                                                                                                                                                                                                          BOVIN
                       SEQUENCE FROM N.A.
STRAIN-HOISTEAIN; TISSUE-Brain;
Hill W.D., Zhang L., Balin B.J.
Submitted (FEB-1997) to the EM
                                                                                                                                                                                                                                                                                                                                                                                                                                        CARBOHYD
CARBOHYD
SITE
SEQUENCE OF
                                                                                                                                                                NFL_BOVIN STANDARD; PRT; 554 AA.

P02548; P79127;
P02548; P79127;
21-JUL-1986 (Rel. 01, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Neurofilament triplet L protein (68 kDa neurofilament protein)
(Neurofilament light polypeptide) (NF-L) (Micro glutamic acid-rich
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SEQUENCE
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                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea; Bovidae; Bos. NCBI_TaxID=9913;
                                                                                                                                                          protein).
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                                                                                                                                    Bos taurus (Bovine).
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                                                                                                                                                                                                                                                                                                         326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               in size between triplet proteins.
EMBO J. 2:1295-1302(1983).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Seisler N., Kaufmann E., Fischer S., Plessmann U., Weber K.;
Neurofilament architecture combines structural principles of
Intermediate filaments with carboxy terminal extensions increasing
                                                                                                                                                                                                                                                                      u
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTIOTHER NEURONAL COMPONENTS OR IONS.
MISCELLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERNEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYME.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FUNCTION: NEUROFILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, MAND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER.

DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH
THE NEUROFILAMENT PROTEINS FROM ALL OTHER INVERMEDIATE FILAMENT
PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FO
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7; Conserv
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llarity 100.0%;
Conservative (
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                      Balin B.J., Sprinkle T.J.; to the EMBL/GenBank/DDBJ databases
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TAIL, SUBDOMAIN A.
TAIL, SUBDOMAIN B.
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TAIL, SUBDOMAIN B.
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COIL 1B.
LINKER 12.
COIL 2A.
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O-LINKED (GLCNAC) (BY SIMILARITY).

O-LINKED (GLCNAC) (BY SIMILARITY).

EPITOPE (RECOGNIZED BY IF-SPECIFIC MONOCLONAL ANTIBODY).
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Pred. No.
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Matches 7
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                                                                                       NFL_COTJA
Q02916;
Q1-FEB-1994
Q1-JUN-1994
16-OCT-2001
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INIT_MET
DOMAIN
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CONFLICT
SEQUENCE
         Coturnix coturnix japonica (Japanese quail).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
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                                                   NEFL.
                                                                          Neurofilament
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PROSITE; PS00226; IF; 1.
Intermediate filament; Coiled
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FUNCTION: NEUROPILAMENT'S USUALLY CONTAIN THREE IF PROTEINS: L, MAND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER. AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER. DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FOR A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH OTHER NEURONAL COMPONENTS OR TONS.
MISCELLANEOUS: NF-L IS THE MOST, ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S Lett. 182:389-392(1985). FUNCTION: NEUROFILAMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY.
                                                                                                                                                                                                                              EALEKQL 7
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int triplet 1
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L protein (Neurofilament light polypeptide)
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COIL 1B.

LINKER 12.

COIL 2A.

LINER 2.

COIL 2B.

TAIL, SUBDOMAIN A.

TAIL, SUBDOMAIN B. (ACIDIC).

MISSING (IN REF. 2).

A -> AEA (IN REF. 2).

MISSING CAREFORM A.

D772B81CA2C31C1A CRC64;
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Pred. No.
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n as determined
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J. Cell Blol. 121:387-395(1993).

J. Cell Blol. 121:387-395(199
                                                                                      01-OCT-1989
01-OCT-1989
15-JUN-2002
Dystrophin.
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasiani
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P11533;
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PROSITE; PS00226; IF; 1.
Intermediate filament; Coiled
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EMBL; D1322; BAA02503.1; ALT_TERM.
InterPro; IPR001664; IF.
Pfam; PF00038; filament; 1.
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SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY.
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(Rel. 12, Last seq.
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TAIL (BY SIMILARITY).

COIL 1A.

COIL 1B.

LINKER 12.

COIL 2A.

LINKER 2.

COIL 2B.

COIL 2B.

TAIL, SUBDOMAIN A.

TAIL, SUBDOMAIN B (ACIDIC).

TAIL, SUBDOBAIN B (ACIDIC).
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PRINTS; PRO0403; WWDOMAIN.
SMART; SM00103; CH; 2.
SMART; SM00103; SPEC; 21.
SMART; SM00456; WW; 1.
SMART; SM00291; ZnF ZZ; 1.
SMART; SM00291; ZnF ZZ; 1.
PROSITE; PS00019; ACTININ_1; 1
PROSITE; PS00020; ACTININ_2; 1
PROSITE; PS010159; WWDOMAIN_1; PROSITE; PS01020; WWDOMAIN_1; PROSITE; PS010357; ZFZZ-1; 1.
PROSITE; PS010357; ZFZZ-1; 1.
Repeat;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     between the Swiss Institute of Bioinformatics the European Bioinformatics Institute. There use by non-profit institutions as modified and this statement is not removed. Use entitles requires a license agreement (See httor send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lemaire C., Heilig R., Mandel J.L.;
"The chicken dystrophin cDNA: striking conservation of the C-terminal coding and 3' untranslated regions between man and chicken.";
EMBO J. 7:4157-4162(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.

MEDLINE-89098331; PubMed-3062582;

Lemaire C., Heilig R., Mandel J.L.;

"Nucleotide sequence of chicken dystrophin cDNA.";

Nucleic Acids Res. 16:11815-11815(1988).
                                                                                                                                                                                                                                                                                                                    Pfam; PF00397; WW; Pfam; PF00435; spec
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InterPro; IPR0021715; Calponin-like.
InterPro; IPR002017; Spectrin.
InterPro; IPR002349; ww.
InterPro; IPR001202; ww_rsp5_wwp.
InterPro; IPR000433; Znf_Zz.
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PIR; S02041; S02041.
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NCBI_TaxID=9031;
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SIMILARITY: CONTAINS 1 ZZ-TYPE ZINC FINGER.
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FUNCTION: MAY PLAY A ROLE IN ANCHORING THE
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SIMILARITY: THE ACTIN-BINDING
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ZF_ZZ_1; 1
ZF_ZZ_2; 1
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                                                                                                                                                                                                                                                                                           P19412;
01-NOV-1990 (Rel. 16, Created)
01-NOV-1990 (Rel. 16, Last agn
15-JUN-2002 (Rel. 41, Last ann
                                                                       Bile acid catabolism.
                                                                                                                                                                              Mallonee D.H., White W.B., Hylemon P.B.; "Cloning and sequencing of a bile acid-inducible Eubacterium sp. Strain vpr 12708."; J. Bacteriol. 172:7011-7019(1990).
                                                                SEQUENCE
                                                                                         EMBL; U57489; AAC45413.1;
PIR; D37844; D37844.
                                                                                                                                                                                                                        SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-91072253; Pubmed-2254270;
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Clostridium
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Firmicutes; Clostridia; Clostridiales;
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Pred. No. 1.6
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1CBCE86C85ADC3E5
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Lon update)
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111.
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                                             Length 166
                                                              AA SEQUENCE).
CRC64;
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                              Indels
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RESULT 9
RF1_TIME 1
ID RF1_TIME 1
AC P9607
DT 01-NO
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DE PEFA.
OS Therm
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GABB_MOUSE
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Best Local :
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                                                                                                                           Mus musculus (Mouse).
Eukaryota; Metazoa; Ch
Mammalia; Eutheria; Ro
NCBI_TaxID=10090;
       SEQUENCE FROM N.A.
MEDLINE-91343912; PubMed-1876836;
Lamarco K. Thompson C.C., Byers |
"Identification of Ets- and notch
                                                                                                                                                                                                                    GABB_MOUSE STANDARD; PRT; 382 AA. Q00420; Q1-DEC-1992 (Rel. 24, Created) 01-DEC-1992 (Rel. 24, Last sequence update) 15-JUN-2002 (Rel. 41, Last annotation update) GA binding protein beta-1 chain (GABP-beta-1; GABPB) OR GABPB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide chain release
PRFA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              InterPro; IPR000352; Pep_rel_factor_I.
InterPro; IPR004373; PrfA.
Pfam; PF00472; RF-1; 1.
Pfam; PF03462; PCRF; 1.
TIGRFAMS; TIGR00019; PrfA; 1.
PROSITE; PS00745; RF-PROK_I; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STARIN-HBB / ATCC 27634;
ITO K., Ebhhara K., Nakamura Y.;
"Cloning of RF-1 gene from Thermus thermophilus HBB.";
Submitted (JAN-1997) to the EMBL/GenBank/DDBJ databases.
-I- FUNCTION: PEPTIDE CHAIN RELEASE FACTOR 1 DIRECTS THE TERMINATION
OF TRANSLATION IN RESPONSE TO THE PEPTIDE CHAIN TERMINATION
CODONS UAG AND UAA (BY SIMILARITY).
-I- SUBCELLULAR LOCATION: Cytoplasmic.
-I- SUBCELLULAR LOCATION: THE PROKARYOTIC AND MITOCHONDRIAL RELEASE
FACTORS FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RF1_THETH
P96077;
01-NOV-1997
01-NOV-1997
16-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            InterPro;
InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Protein blosynthesis. SEQUENCE 354 AA; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  use by non-profit institutions as long modified and this statement is not removed. entities requires a license agreement (See or send an email to license@isb-sib.ch).
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InterPro; IPR005139; PCRF.
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Bacteria; Thermus/Deinococcus
Thermaceae; Thermus.
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6; Conserv
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(Rel. 35, Last sequence update)
(Rel. 40, Last annotation update)
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Rodentia;
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                                Byers B.P.,
       Byers B.P., Walton E.M., notch-related subunits
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 29; DB
Pred. No. 64;
                                                                                                                                             Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
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                                                                                                                                                                                                                                             subunit)
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       'n
McKnight S.L.;
In GA binding
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                                                                                                                                                                                                                                             (GABPB1)
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RESULT 11

GABB_HUMAN STANDARD; PRT; 383 AA.

ID GABB_HUMAN STANDARD; PRT; 383 AA.

AC 00547;
DT 01-NOV-1995 (Rel. 32, Created)
DT 15-7UN-2002 (Rel. 41, Last sequence update)
DT 15-7UN-2002 (Rel. 41, Last annotation update)
DE factor E4TF1-53) (GABPB1) (Nuclear respiratory factor-2 subunit beta DE 2).
GABPB1 OR GABPB OR E4TF1B.
OC ENKARYOTE, MCTAZOG; Chordata; Craniata; Vertebrata; Euteleostomi; OX NCBI_TAXID=9606;
RN [1]
RP SEQUENCE FROM N.A.
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Best Local
Matches.
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PDB; 1AWC; 18-MAR-98.
TRANSFAC; T00298; -.
TRANSFAC; T01403; -.
MGD; MGI:95611; Gabpb1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SMART; SM00248; ANK; 3.

PROSITE; PS50088; ANK_REPEAT; 3.

PROSITE; PS50088; ANK_REP_REGION; 1.

Transcription regulation; Nuclear protein; Alternative splicing; ANK repeat; Repeat; 3D-structure.

REPEAT 37 66 ANK 2.

REPEAT 37 66 ANK 2.

REPEAT 70 99 ANK 3.

REPEAT 103 132 ANK 4.

REPEAT 103 132 ANK 5.

REPEAT 136 166 ANK 5.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         InterPro; IPRO02110; ANK. Pfam; PF00023; ank; 4. PRINTS; PR01415; ANKYRIN.
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ALTERNATIVE PRODUCTS: 2 isoforms; beta-1 (shown here) and beta-2 (AC Q00421); are produced by alternative splicing. They differ only in the C-terminal extremity.
SIMILARITY: CONTAINS 5 ANK REPEATS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FUNCTION: TRANSCRIPTION FACTOR RICH REPEATS (GA REPEATS).
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6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            253:789-792(1991).
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PubMed=9461436;
Lper D F
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Pred. No. 70;
1; Mismatches
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OAT_FLAFD
ID OAT_P
AC 0078D
AC 0078D
DT 01-OC
DT 10-OC
DT 16-OC
DT 07-OT
DE OXILT
DE aminc
GN OAT
OX PLAST
OX NCBI_
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Best Local S
Matches 6
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Mol. Cell. Biol. 15:02-111(1995).

Mol. Cell. Biol. 15:02-111(1995).

-i- FUNCTION: TRANSCRIPTION FACTOR CAPABLE OF II

RICH REPEATS (GA REPEATS). NECESSARY FOR TH

ADENOVIRUS 64 GENE.

-i- SUBUNIT: HETEROTETRAMER OF TWO ALPHA AND TWO

-i- ALTERNATIVE PRODUCTS: 2 1soforms; beta-1 (si

(AC Q06545); are produced by alternative sp

-i- SIMILARITY: CONTAINS 5 ANK REPEATS.
                                                                                                                                                                                                                                                                                                       REPEAT
REPEAT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Watanabe H., Sav
Handa H.;
"cDNA cloning of
notch motifs.";
                                                 OAT_FLAFD STANDARD; PRT; 414 AA Q07805; 01-OCT-1994 (Rel. 30, Created) 101-OCT-1994 (Rel. 30, Last sequence update) 16-OCT-2001 (Rel. 40, Last annotation update) Ornithine aminotransferase (EC 2.6.1.13) (One aminotransferase).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genew; HGNC:4073; GABPB1 MIM; 600610; -.
 Plasmodium falciparum Eukaryota; Alveolata; NCBI_TaxID=5836;
                                                                                                                                                                                                                                                                                                                                               REPEAT
REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                             SMART; SMUJUA'S; DANK, REPEAT; 3. PROSITE; PS50088; ANK_REP_REGION; PROSITE; PS50297; ANK_REP_REGION; Nuclear
                                                                                                                                                                                                                                                                                                                                                                                                                                           PRINTS;
SMART; S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; D13317; BAA02574.1; EMBL; U13046; AAA65708.1; HSSP; Q00420; LAWC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR002110; ANK Pfam; PF00023; ank; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nuclear respiratory factor activation domain.":
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Gugneja S., Virbasius J.V., Scarpulla R.C.;
"Four structurally distinct, non-DNA-bindin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HSSP; Q00420; 11
TRANSFAC; T0139:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM
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383 AA;
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99
132
166
                                                                                                                                                                                                                                                                                                          41321
                                                                                                                                                                                                                                                                90.6%;
85.7%;
                           (isolate CDC
             Apicomplexa;
                                                                                                                                                                                                                                                                                                          MW;
                                                                                                                                                                                                                                                                                                      ANK 1.
ANK 2.
ANK 3.
ANK 4.
ANK 5.
ANK 5.
CTE7081A60016288 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 share a conserved
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          K.-I.,

    protein; Alternative splicing;

            Haemosporida;
                           / Honduras)
                                                                update)
13) (Ornithine--oxo-acid
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             Plasmodium
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RESULT 13
TIPE_CLOTM
ID TRPE_C
AC P14953
DT 01-APR
DT 01-APR
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DT 01-APR
DT 01-APR
OC Clostr
OC Bacter
OC Clostr
OX MEDLIN
RA SEQUEN
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RL J. B10
CC -I-- MI
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Best Local Similarity
Matches 6; Conser
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P14953;
01-APR-1990
                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entities
or send a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collaborate between the Swiss Institute of Bioinformatics and the EMBL outstative Entropean Bioinformatics Institute. There are no restrictions on use by non-profit institutions as long as its content is in no modified and this statement is not removed. Usage by and for commer
                                                                                                                                                                                                                                                                                                                      01-APR-1990
15-JUN-2002
                                                                                                                                                                                                                                                                                                         Anthranilate synthase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-94088678; PubMed-8264733; Schmld S.R., Linder P., Reese R.T., Stanley H.A.; "Characterization of a putative ornithine aminotr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; L15426; AAA16481.1; -. HSSP; P04181; 20AT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Plasmodium falciparum."
                                                                                                                                                                                                                                                                                                                                                                                                                                         183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                        lostridium thermocellum.
acteria; Firmicutes; Clostridia; Clostridiales; Clostridiaceae;
                                     USING AMMONIA RATHER THAN GLUTAMINE, WHI GLUTAMINE AMIDOTRANSFERASE ACTIVITY. SIMILARITY: BELONGS TO THE ANTHRANILATE
                                                                                                  pyruvate + L-glutamate,
PATHWAY: Tryptophan biosynthesis; first step.
SUBUNIT: TETRAMER OF TWO COMPONENTS I AND TWO
                                                                 MISCELLANEOUS: COMPONENT I
USING AMMONIA RATHER THAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SMODIUM TAICLPARUM.",
Biochem. Parasitol. 61:311-314(1993).
CAPALYTIC ACTIVITY: L-ornithine + a 2-c
semialdehyde + an L-amino acid.
COPACTOR: PYRIDOXAL PHOSPHATE.
     SWISS-PROT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUBCELLULAR LOCATION: Cytoplasmic (Probable).
SIMILARITY: BELONGS TO CLASS-III OF PYRIDOXAL-PHOSPHATE-DEPENDENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AMINOTRANSFERASES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    s requires a license agreement (See http://www.isb-sib.ch/announce/an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                      (Rel.
                                                                                                                                                                                                                                                                                                                                              (Rel. 14, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                          STANDARD;
   entry
                                                           COMPONENT I CATALYZES THE FORMATION OF ANTHRANILATE RATHER THAN GLUTAMINE, WHEREAS COMPONENT II PROVIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   90.6%;
   69
                                                                                                                                                                                                                                                                                                      Last sequence update)
Last annotation update)
component I (EC 4.1.3.27).
 copyright.
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Pred. No.
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 It
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75;
 19
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 produced
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                                     COMPONENT
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RESULT

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RESULT 14
YO56_NVAC
ID YO56_N
AC P41467
AC P41467
D7 01-NOV
D7 01-NOV
D7 01-NOV
D7 01-NOV
D8 HUTOGI
OC V1ruse
OC NUCLEO
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RP SEQUEN
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P41467;
01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
01-NOV-1997 (Rel. 35, Last annotation update)
01-NOV-1997 (Rel. 35, Last annotation update)
Hypothetical 94.0 kDa protein in POL-LEF3 intergenic region.
Autographa californica nuclear polyhedrosis virus (ACMNPV).
Autographa viruses, no RNA stage; Baculoviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Y066_NPVAC
P41467;
01-NOV-1995
01-NOV-1995
01-NOV-1997
                                                                                                                                                                                   Hypothetical DOMAIN 1
                                                                                                                                                                                                                                     EMBL; L22858; AAA66696.1; -.
                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-94303173; PubMed-8030224;
Ayres M.D., Howard S.C., Kuzio J., Lopez-Ferber M., Possee R.D.;
"The complete DNA sequence of Autographa callfornica nuclear polyhedrosis virus.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; D00399; BAA00300.1; -.

PIR; JX0065; JX0065.

HSSP; Q06128; 1DDL.

InterPro; IPR005256; Anth_synthI.

InterPro; IPR000350; Chorismate_bind.

Pfam; PF00425; Chorismate_bind; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VITOLOGY 202:586-605(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Viruses; dsDNA viruses,
Nucleopolyhedrovirus.
NCBI_TaxID=46015;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRINTS; PRO0095; ANTSNTHASEI.

Probom; PD000779; Chorismate_bind;
TIGRERAMS; TIGRE0564; trpE_most; 1.

Tryptophan biosynthesis; Lyase.
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       323 EALEKEL 329
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EALEKQL
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6; Conser
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93973 MW;
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                                            Score 29; DB 1; L
Pred. No. 1.5e+02;
1; Mismatches 0;
                                                                                                                                                     POLY-PRO.
76A871D2B6633F8A CRC64;
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Pred. No.
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Search completed: November 13, 2002, 13:16:51 Job time: 6.80851 secs
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Best Local Similarity
Matches 6; Conserv
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Q28628;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN-New Zealand white; TISSUE-Gastric parietal cell;
STRAIN-New Zealand white; TISSUE-Gastric parietal cell;
STRAIN-New Zealand white; Tissue-Gastric parietal cell;
Dransfield D.T., Yeh J.L., Bradford A.J., Goldenring J.R.;
"Identification and characterization of a novel A-kinase-anchoring protein (AKAPI20) from rabbit gastric parietal cells.";
Blochem. J. 322:801-808(1997).
-I- FUNCTION: BINDS TO TYPE II REGULATORY SUBUNITS OF PROTEIN KINASE A. MAY BE A SCAFFOLDING PROTEIN.
-I- TISSUE SPECIFICITY: HIGHLY EXPRESSED IN GASTRIC PARIETAL CELLS.
-I- DOMAIN: RII BINDING SITE, PREDICTED TO FORM AN AMPHIPATHIC HELIX, COULD PARTICIPATE IN PROTEIN-PROTEIN INTERACTIONS WITH A. COMPLEMENTARY SURFACE ON THE R-SUBUNIT DIMER.
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DOMAIN
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SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oryctolagus cuniculus (Rabbit).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
                                                                                                                                                                                                                                                                                                                                 EMBL; U26360; AAC35413.1; ALT_INIT. Coiled coil.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID-9986;
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16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
16-OCT-2001 (Rel. 40, Last annotation update)
A-kinase anchor protein 9 (Protein kinase A anchoring protein 9)
(PRKA9) (A-kinase anchor protein 120 kDa) (AKAP 120) (Fragment).
                                                                     1 EALEKQL 7
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54 QALEKQL 60
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559 572
5 461
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1087 1087
1087 AA; 12
                                                                                                                                              Conservative
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                                                                                                                                                                                                                   124756 MW; 9D916BE0CA89FF02 CRC64;
                                                                                                                                                               90.6%;
                                                                                                                                          Score 29; DB 1; Length 1087; Pred. No. 2e+02; 1; Mismatches 0; Indels
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Result
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Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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       Pred. No. 1s the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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Match
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32
1 EALEKQL 7
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11:
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16:
      671580 segs, 206047115 residues
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Gapop 10.0 , Gapext 0.5
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Copyright (c) 1993 - 2002 Compugen Ltd
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G9KER7
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Q8VMH2
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094729 schlzosacch
08vmh2 pseudomonas
09swq5 oryza sativ
09leh9 hordeum vul
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08tcr7 homo sapien
091f05 cydia pomon
08rb86 thermoanaer
09aq15 streptococc
087187 streptococc
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ALIGNMENTS

OBTSKI PRELIMINARY; PRT; 309 AA.
OBTSKI,
01-JUN-2002 (TIEMBLIE1. 21, Created)
01-JUN-2002 (TIEMBLIE1. 21, Last sequence update)
01-JUN-2002 (TIEMBLIE1. 21, Last annotation update)

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Query Match 100.0%; Score 32; DB 17; Lengt Best Local Similarity 100.0%; Pred. No. 68; Matches 7; Conservative 0; Mismatches 0; Inde	KW Hypothetical protein; Complete proteome. SQ SEQUENCE 309 AA; 35362 MW; D25EAABFFC7FFEF6 CRC64;	 RA Metcalf W.W., Birren B.; RT "The genome of Methanosarcina acetivorans reveals extensive metabolic RT and physiological diversity".	RA Pritchett M., Sowers K.R., Jing H., Macario A.J.L., Paulsen I.,			RA Linton L., McEwan P., McKernan K., Talamas J., Tirrell A., Ye W., RA Zimmer A., Barber R.D., Cann I., Graham D.E., Grahame D.A., Guss	-	RA Galagan J.E., Nusbaum C., Roy A., Endrizzi M.G., Macdonald P., RA FitzHugh W., Calvo S., Engels R., Smirnov S., Atnoor D., Brown A	RC STRAIN=C2A / ATCC 35395 / DSM 2834:		OC Methanosarcinaceae; Methanosarcina.	GN MA0795.	DE Hypothetical protein MA0795.	The same same to the same that the the s
0; Indels		ns reveals extensive n	rio A.J.L., Paulsen I , Zinder S.H., Lander	B., Reeve J.N., Smit hite R.H., de Macario	H.C., Krzycki J.A.,	nas J., Tirrell A., Y.	DeArellano K., Johnson	zzi M.G., Macdonald P			Methanosarcinales;		cace appeared)	יים ומחמון
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Q8TCR7;
Q1-JUN-2002 (TremBirel. 21, Created)
Q1-JUN-2002 (TremBirel. 21, Last seque)
Q1-JUN-2002 (TremBirel. 21, Last annot Hypothetical 43.8 kDa protein (Fragmen DKFZF761K0922.
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STRAIN-MEXICAN 1;
MEDLINE-97380577; PubMed-9237352;
Kang W., Crook N.E., Winstanley D.,
"Complete sequence and transposon m
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MEDLINE-96207404; PubMed-8615018;
Theilmann D.A., Chantler J.K., Stweart S.,
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MEDLINE-93188168; PubMed-8445726;
CYCOK N.E., Clem R.J., Miller L.K
"An apoptosis-inhibiting baculovi
motif.";
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granulovirus).
Viruses; dsDNA viruses,
NCBI_TaxID=28289;
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01-DEC-2001 (TrEMBLrel. 19, Last sequence up
01-DEC-2001 (TrEMBLrel. 19, Last annotation
01-DEC-2001 (TrEMBLrel. 19, Last annotation
08E50 similar to XCGV ORF47.
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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Similarity 100.0%;
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EMBL/GenBank/DDBJ databases.
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STRAIN-MB47 / JCM11007;
MEDLINE-21992816; pubMed-11997336;
Bao Q., Tian Y., Li W., Xu Z., Xuan Z., Hu Bao Q., Tian Y., Li W., Lai X., Huang L., Tan H., Chen R., Wang J., Yu J., Yang H., Tan H., Chen R., Wang J., Yu J., Yang H., A complete sequence of T. tengcongensis Genome Res. 12:689-700(2002).
EMBL; AE013059; AAM24192.1; -.
Hypothetical protein; Complete proteome. SEQUENCE 79 AA; 9078 MW; B3FC525B10E99
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Q9AQ15;
Q1-JUN-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bacteria; Firmicutes; Bac
Thermoanaerobacteriales;
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Genes 14:131-136(1997).
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                     Yamamoto
Iijima S.
                                                                                                                      Streptococcus agalactiae.
Bacteria; Firmicutes; Bacillus/Clostridium
Streptococcaceae; Streptococcus.
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Submitted (NOV-2000) to the EMBL/GenBank/DDBJ EMBL; AB05073; BAB21606.1; -.
NON_TER 203 203
SEQUENCE 203 203
                              SEQUENCE FROM N.A. MEDLINE-99395021; Po Yamamoto S., Miyake
                                                                                                          Streptococcaceae; NCBI_TaxID=1311;
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"Identification and Characterization of cps (cones from Streptococcus agalactiae Type Ia.";
Submitted (SEP-1998) to the EMBL/GenBank/DDBJ
EMBL; AB017355; BAA33754.1;
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O1-UN-2001 (TrEMBLrel. 17, Created)

O1-JUN-2001 (TrEMBLrel. 17, Last sequence update)

O1-MAR-2002 (TrEMBLrel. 20, Last annotation update)

O1-MAR-2002 (TrEMBLrel. 20, Last annotation update)

Putative UDP-N-acetylglucosamine-2-epimerase NeuC.
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McKinnon K., Chaffin D.O., F
Submitted (JAN-2001) to the
EMBL; AF337958; AAK11671.1;
InterPro; IPR000169; SHprot_
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Bacteria; Firmicutes; Bacillus/
Streptococcaceae; Streptococcus
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NCBI_TaxID=1311;
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Chaffin D.O., Beres S.B., Yim H.H., Rubens C.E.;
The Serotype of Type Ia and III Group B Streptococci Is Det
the Polymerase Gene within the Polycistronic Capsule Operon.
J. Bacteriol. 182:4466-4477(2000).
EMBL; AF163833; AAD53075.1;
InterPro; IPR000169; SHPPROTEASE_HIS; UNKNOWN_1.
PROSITE; PS00639; THIOL_PROTEASE_HIS; UNKNOWN_1.
                                                                                                                                 SEQUENCE FR
STRAIN-NT6;
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Interpro; IPRO01059; SHprot_acsite.
PROSITE; PS00225; CRYSTALLIN_BETAGAMMA; UNKNOWN_PROSITE; PS00639; THIOL_PROTEASE_HIS; UNKNOWN_I.
SEQUENCE 384 AA; 42922 MW; 3293FA83F135BFFB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Streptococcus agalactiae.
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NCBI_TaxID=1311;
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6; Conservative
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(TrEMBLrel.
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85.7%;
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20,
                                                                                                      Rubens
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Pred. No. 2.2e
1; Mismatches
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Pred. No. 2.2e
1; Mismatches
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2.2e+02;
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RESULT OPERATE OF THE CONTROL OF THE
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STRAIN-CNCTC 1/82;

MCKinnon K., Chaffin D.O., Rubens control of the complete sequence of the EMBL/GenBank/DDBJ database of 
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01-JUN-2001
01-JUN-2001
                                                                                                               STRAIN-CNTC 1/82;
MCKINDON K., Chaffin D.O., Rubens C.E.;
Submitted (MAR-2001) to the EMBL/GenBank/DDBJ da
EMBL; AF355776; AAK43616.1; -.
InterPro; IFR000169; SHPOTE_acsite.
PROSITE; PR00639; THIOL_PROTEASE_HIS; UNKNOWN_1.
SEQUENCE 384 AA; 43004 MW; 21488688A868EE24
                                                                                                                                                                                                                                                                                                       Streptococcus agalactiae.
Bacteria; Firmicutes; Bacillus/Clostridium
Streptococaceae; Streptococcus.
NCBI_TaxID=1311;
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01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Putative UDP-N-acetylglucosamine-2-epimerase NeuC.
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SEQUENCE
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Bacteria; Firmicutes; Bacillus/
Streptococcaceae; Streptococcus
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Pred. No. 2.2e-
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Best Local S
Matches 6
MEDININE-3/2,
MEDININE-3/18484401; PubMed=11859360;
MEDININE-218484401; PubMed=11859360;
MOOD V., Gwilliam R., Rajandream M.A., Lyne M., Lyne R., Stewart A.,
Sgouros J., Peat N., Hayles J., Baker S., Basham D., Bowman S.,
Brooks K., Brown D., Brown S., Chillingworth T., Churcher C.M.,
Collins M., Connor R., Cronin A., Davis P., Feltwell T., Fraser A.,
Gentles S., Goble A., Hamlin N., Harris D., Hidalgo J., Hodgson G.,
Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
James K., Jones L., Jones M., Leather S., McDonald S., McLean J.,
Mooney P., Moule S., Mungall K., Murphy L., Niblett D., Odell C.,
Oliver K., O'Neil S., Pearson D., Quail M.A., Rabbinowitsch E.,
                                                                                                                                                                                                                                                                                                 Schizosaccharomyces pombe (Fission yeast).
Eukaryota; Fungi; Ascomycota; Schizosaccharomycetaes;
Schizosaccharomycetales; Schizosaccharomycetaceae;
Schizosaccharomyces.
                                                                                                                                                                                                                                                                                                                                                                                                   01-MAY-1999 (TrEMBLrel. 10, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Hypothetical protein C1604.17c in chromosome II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q9KER7;
01-OCT-2000
01-OCT-2000
01-JUN-2002
                                                                                                                                                                                                                                                                NCBI_TaxID=4896;
[1]
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Pfam; PF00202; aminotran_3; 1.
TIGREAMS; TIGR00508; bloa; 1.
PROSITE; PS00600; AA_TRANSFER_CLASS_3;
                                                                                                                                                                                                                      STRAIN-972
                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                        SPBC1604.17C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             094729;
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EMBL; APO01509; BAB04501.1; -.
HSSP; P04181; 20AT.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN-C-125 / JCM 9153;
MEDLINE-20512582; PubMed-11058132;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bacillaceae; Baci
NCBI_TaxID=86665;
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Bacillaceae; Bacillus
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85.7%;
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-oxononanoate aminotransferase.
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Pred. No. 2.6e
1; Mismatches
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., Kuhara S
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RESULT 15
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ID Q9SWQ
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QBVMH
AC QBVMH
AC QBVMH
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Best Local :
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  Q9SWQ5
                                                                                                                                                                                                                                                                                                                                                                                                               Greated A., Lambertson L., Williams P.A., Thomas "Complete nuclectide sequence of IncP-9 plasmid p Submitted (AUG-2001) to the EMBL/GenBank/DDBJ dat EMBL; AJ344068; CAC86842.1; -. InterPro; IPR000551; HTH_MerR. Pf00376; merR; 1.
                                                                                                                                                                                                                                                                                                                   PRINTS; PRO0040; HTHMERR.
SMART; SM00422; HTH_MERR; 1.
Hypochetical protein; Plasmid.
SEQUENCE 135 AA; 15402 MW;
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EMBL; AL034433; CAA22350.2; -.
Hypothetical machine.
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01-MAR-2002 (TrEMBLrel. 20, La
01-JUN-2002 (TrEMBLrel. 21, La
01-JUN-2002 (TrEMBLrel. 21, La
Hypothetical 15.4 kDa protein.
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DOMAIN

4 45 COILED COIL (POTENTIAL).

SEQUENCE 459 AA; 53388 MW; 6A1B5D30ABF3616E CRC64;
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Nature 415:871-880(2002).
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6; Conserv
PRELIMINARY;
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85.7%;
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; Pred. No. 1.4e
1; Mismatches
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PRT;
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238 AA.
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databases.
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Best Local Similarity
                                                                                                                                                                                     InterPro; IPR002487; TF_Kbox.
InterPro; IPR002100; TF_MADSbox.
Pfam; PF01486; K-box; 1.
Pfam; PF00319; SRF-TF; 1.
PRINTS; PR00404; MADSDOMAIN.
SMART; SM00432; MADS; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                      Q9SWQ5;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
                                                                                                                                                                                                                                                              Jia H., Cong B., Shao J., Sun
Submitted (APR-1999) to the EM
EMBL; AF141966; AAD38370.1; -.
HSSP; P11831; 1SRS.
                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Viridiplantae; Streptophyta; En
Spermatophyta; Magnoliophyta; Liliopsida;
Ehrhartoideae; Oryzeae; Oryza.
                                                                                                                                                  SEQUENCE
                                                                                                                                                                        PROSITE; PS50066; MADS_BOX_2;
                                                                                                                                                                                                                                                                                                                STRAIN-GUANGLUAI 4;
                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                     Oryza sativa (Rice).
                                                                                                                                                                                                                                                                                                                                                                                                                MADS-box protein
                                                 117 ESLEKQL
                                                                           1 EALEKQL 7
                                                                                                                                                  238 AA;
                                                                                                  Conservative
                                                  123
                                                                                                                                                                                                                                                                                                                                                                                                                 FDRMADS1 (Fragment).
                                                                                                                                                 27376 MW;
                                                                                                             90.6%;
                                                                                                                                                                                                                                                                                       Sun C.;
he EMBL/GenBank/DDBJ databases.
            2002, 13:16:07
                                                                                                             Score 29;
Pred. No.
                                                                                                                                                 405E797E5B1152C6 CRC64;
                                                                                                 Mismatches
                                                                                                             DB 10;
2.3e+02;
                                                                                                                                                                                                                                                                                                                                                                           Embryophyta; Tracheophyta;
a; Poales; Poaceae;
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                                                                                                                       Length 238;
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                                                                                                 Gaps
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Result
No.
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Perfect score:
Sequence:
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OM protein - protein search, using sw model
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                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. 1s the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                         Query
Match
               100.0
100.0
88.9
88.9
86.1
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36
1 ELEDKQN 7
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Gapop 10.0 , Gapext 0.5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /SIDS2/gcgdata/geneseq/geneseqp-emb1/AA198.DAT:*
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA198.DAT:*
/SIDS2/gcgdata/geneseq/geneseqp-emb1/AA198.DAT:*
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Copyright (c) 1993 - 2002 Compugen Ltd.
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                                                                                                                                                                                                                                                                                         Length
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          AAB05928
AAW20612
AAW93466
ABB92714
AAG42403
AAG42402
AAG622130
AAG622130
ABB68503
ABP30505
                                                                                                                                                                                                                                                                                                                                                             SUMMARIES
                                                                         Test antigen #4 fo
Human neurofilamen
Human polypeptide,
Herbicidally activ
Arabidopsis thalia
Arabidopsis thalia
Arabidopsis thalia
                                                                                                                                                                                                                                                                                 Description
                          Human secreted pro
Drosophila melanog
poly
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musculoskel	ABB03166	22	41		28	4
ryanoo	ABB11532	22	76		29	4
n novel	AAU14347	22			29	ū
Novel human diagno	ABG04063	22	36		29	4.
Drosophila melano	ABB71182	22	8		29	4
Herbicidally activ	ABB93031	23			2 6	- 6
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an protein s	AAB94270	22			2	ŭ
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Arabidopsis thalia	AAG46684	21		_	29) (L)
Herbicidally activ	ABB93668	23		_	29	4.
Arabidopsis thalia	AAG46685	21		_	29	i Li
Drosophila melano	ABB71575	22		_	29	32
Arabidopsis thali	AAG46686	21		_	29	i ii
	AAG25750	21		_	29	30
B. lactofermentum	AAB50548	22		_	29	29
ynebacterium q	AAB80125	22		_	29	28
lutamicum prot	AAG91524	22		_	29	27
rabidopsis the	AAG25751	21		_	29	26
burddorfer	AAY20136	20		0	29	25
rabidopsis tha	AAG25752	21		o	29	24
feri an	AAY20137	20		O	29	23
Staphylococcus epi	ABP39756	23	196	80.6	29	22
CCUS	AAU37549	22		Ç	29	21
occus au	AAU37159	22		O	29	20
occus au	AAU36816 .	22		0	29	19
occus au	AAU33822	22		0	29	18
õ	AAW23420	18		0	29	17
erial MutSi	ABG62497	23		0	29	16
n type 3 inos	AAR99850	17	7	ω	30	15
rosophila	ABB58422	22		ω	30	14
tococcus	ABP27724	23	548	ω	30	13
ino acid seque	AAB07761	21		w	30	12
Streptococcus pol	ABP28875	23		σ	31	11

ALIGNMENTS

Test antigen #4 for spongiform and demyelinating disease diagnosis.

17-OCT-2000

(first entry)

AAB05928 standard; peptide; 7 AA.

Diagnosing spongiform or demyelinating disease in vertebrates such as bovine spongiform encephalopathy and Creutzfeld-Jacob disease comprises WPI; 2000-400194/34. Ebringer A; 26-NOV-1998; 02-JUN-2000. Human; cow; myelin; myelin neurofilament; immunogen; antigen; bovine spongiform encephalopathy; BSE; multiple sclerosis; Creutzfeld-Yacob disease; CJD; demyelinating disease; diagnostic test. 25-NOV-1999; WO200031545-A1 Homo sapiens. Bos taurus. (UNLO) KING'S COLLEGE. 98GB-0025948. 99WO-GB03936.

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RESULT
ARAZOUT
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                                                                              Diagnosing disease by detecti
corresponding protein mutatic
neurological diseases, partic
for treatment and prevention
        Disclosure;
                                                                                                                                                                                                                                                                                                                                                  (UYUT-) RIJKSUNIV UTRECHT.
(ROYA-) ROYAL NETHERLANDS ACAD
(UYRO-) UNIV ROTTERDAM ERASMUS.
                                                                                                                                                                                                                           N-PSDB;
                                                                                                                                                                                                                                                                                                     Burbach JPH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-APR-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9845322-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; beta-amyloid precursor protein; beta-APP; diagnosis; cancer; frameshift mutation; age-related disease; neurodegenerative disorder; Alzhelmer's disease; Down's syndrome; myotonic dystrophy; neuronal; Huntington's disease; multiple scierosis; alcoholic liver disease; diabetes mellitus type II; microtubule associated protein; Tau; Biquitin B; apolipoprotein E; MAP2; neurofilament-L; neurofilament-H; neurofilament-F; presenilin I; presenilin II; cellular tumour antigen; glial fibrillary acidic protein; GFAP; p53; semaphorin III; HUPF-I; bc1-2; B-cell leukemia/Lymphoma 2 proto-oncogene; HMGP-C; NSP-A; high mobility group protein-C; neuroendocrine specific protein A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present peptide may be used as a test antigen in a kit for diagnosing spongiform or demyelinating disease in vertebrates, including bovine spongiform encephalopathy (BSE), multiple sclerosis (MS) and Creutzfeld-Jacob disease (CJD). Peptides used in the kit are antigenic components of myelin or myelin neurofilaments. Biological samples are assayed for antibodies, especially ISA antibodies, which bind to myelin and/or myelin neurofilaments or an antigenic peptide, such as the present sequence. Any reading in excess of two standard deviations of the healthy controls would indicate a positive response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human neurofilament-L wild type protein fragment 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAY20612 standard; Protein; 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
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nes 7; Conserv
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DB; AAX75758.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             beta-amyloid precursor
     Figure
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illarity 100.
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     7;
                                                                detecting frameshift mutations in RNA or mutations - used to diagnose cancer and , particularly Alzheimer's disease, and also entitle amerific ribozymes or wild-type
258pp; English
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S
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Pred. No.
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                                                                                                                                                                                                                                                                                               Leeuwen FW
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7.8e+05;
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RESULT 3
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ID AAM9
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
The invention relates to primers for synthesising full length cDN clones. 830 CDNA molecules encoding a human protein have been isolated and nucleotide sequences of 5'- and 3'-ends of the cDNA molecules have been determined. Primers for synthesising the full CDNA are useful for clarifying the function of the protein encode
                                                                                                                                                                                                                                                                                      08-JUL-1999;
11-JAN-2000;
02-MAY-2000;
                                                                                               Claim
                                                                                                                 830\ \text{Primers} useful for synthesizing full length cDNA clones use in genetic manipulation -
                                                                                                                                                                  WPI; 2001-524255/58.
N-PSDB; AAK94387.
                                                                                                                                                                                                                              Ota T,
                                                                                                                                                                                                             Wakamatsu A,
                                                                                                                                                                                                                                                                                                                                                07-JUL-2000;
                                                                                                                                                                                                                                                         (HELI-) HELIX RES INST
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                                                                                                                                                                                                                                                                                                                                                                                                           EP1130094-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; full length cDNA; cDNA synthesis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human polypeptide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAM93466;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAM93466 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This invention describes a novel method for the diagnosis of a disease caused by, or associated with, an RNA molecule that has a frameshift mutation. The method is used to diagnose age-related diseases, especially cancer and a wide range of neurodegenerative disorders (e.g. Albheimar's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   394
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7; Conserv
                                                                                          SEQ ID NO 3132;
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2000JP-0118774.
2000JP-0183765.
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                                                                                                                                                                                                             Sugiyama
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na T, Nagai
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                                                                                       1380pp + sequence listing; English
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Pred. No. 49;
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                                                                                                                                                                                                            Hayashi K,
K, Kojima
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               oligo-capping.
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S, Otsuki
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T, Koga
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                                                                                                        The invention relates to identifying target proteins (ABB940790-ABB94016) for herbicidally active compounds, comprising aligning and comparing nucleic acid or amino acid sequences from plant with nucleic acid or amino acid sequences from non-plant organisms using suitable search parameters, where plant sequences having an E-value greater by a factor of 3 than the E-value of most similar non-plant sequences are selected. The polypeptides or nucleic acids encoding them useful for identifying modulators. The identified modulators are
                                                                                 Sequence
                                                                                                                                                                                                                           Identifying plant target proteins for herbicidally active compounds, comprising aligning and comparing nucleic acid or amino acid sequences from plant with nucleic acid or amino acid sequences from non-plant
                                                                                                                                                                                                     Claim
                                                                                                                                                                                                                      organisms
                                                                                                                                                                                                                                                                        WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the cDNA. The full length clones were obtained by construction of full length enriched cDNA libraries that were synthesised by the oligo-capping method. The primers enable the production of the full length cDNA easily without any special methods. The present sequence is a polypeptide encoded by a full length human cDNA of the invention.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in CD-ROM format directly from EPO.
                                                                                                    useful as herbicides.
                                                                                                                                                                                                                                                                                          Tietjen K, Weidler M;
                                                                                                                                                                                                                                                                                                             (FARB ) BAYER AG.
                                                                                                                                                                                                                                                                                                                                28-AUG-2001; 2001WO-EP09892
                                                                                                                                                                                                                                                                                                                                                   28-AUG-2001; 2001WO-EP09892.
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                                                                                                                                                                                                                                                                                                                                                                                                            Arabidopsis thaliana.
                                                                                                                                                                                                                                                                                                                                                                                                                               Herbicidal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Herbicidally active polypeptide SEQ ID NO 1925.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAY-2002 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABB92714 standard; Protein; 357
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                                           Conservative
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25-FEB-2000;
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2000EP-0301439
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RESULT 6
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Matches 6
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3.8e+02;
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RESULT 7
AAG42401 standard; P:
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 Protein identification; signal transduction pathway; metabolic pathway;
hybridisation assay; genetic mapping; gene expression control; promoter;
                                                     Arabidopsis thaliana protein fragment SEQ ID NO: 52877.
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99US-0121825

99US-0123180

99US-0123548

99US-0125788

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99US-0128714

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RESULT 8
AAG02130
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990S-0161404

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990S-0161406

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                                                                                        protein, SEQ ID NO:
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                                                                                                           entry)
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Pred. No. 4.5e+02;
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RESULT 9
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                                                                                                                                                                                                 23-MAR-2000;
11-JUL-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                 Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Drosophila; developmental
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                                                                                              Venter JC,
                                                                                                                                                                                                                                                                             23-MAR-2001; 2001WO-US09231
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         regulatory sequences and to design expression and secretion
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                     2001-656860/75.
DB; ABL12606.
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6; Conserv
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                                                                                              Adams M,
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85.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         biology; cell signalling; insecticide;
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Pred. No. 1.1e
0; Mismatches
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                                                                                                EW;
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1.1e+02;
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RESULT 10
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Matches 6
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24-NOV-2000;
07-MAR-2001;
                                                                                                                                                                          (CHIR-)
                                                                                                                                                                                                                                                                                                                                            Streptococcus; GAS; GBS; group B streptococcus; Streptococcus agalactiae; group A streptococcus; Streptococcus pyogenes; antibacterial; antiinflammatory; infection; vaccine; meningitis; gene therapy.
                                                                                                                                                                                                                                                                                                                         Streptococcus agalactiae
                                                                                                                                                                                                                                                                                                                                                                                           Streptococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from prosophila. The inventiuseful in developmental biology and in elucidating cell signalling cell: cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABLIG176-ABL30511), expressed DNA sequences (ABLIG176-ABL30511), expressed DNA sequences (ABLIG176-ABL30511).
                                                                                                                                                      Telford
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                                                                                                                                          rettelin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ABB57737-ABB72072).
The sequence data for this patent did not form specification, but was obtained in electronic i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signalling and cell-cell
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                                                                                                         2002-352536/38
DB; ABN71136.
                                                                                                                                        1 J,
                                                                                                                                                                          CHIRON SPA.
INST GENOMIC
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                                                                                                                                                     Masignani
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2000GB-0028727.
2001GB-0005640.
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                                                                                                                                                                                                                                                                                                                                                                                          polypeptide
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Pred. No.
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1.8e+02;
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The invention relates to a protein (ABP25413-ABP30895) from group B streptococcus/GBS (Streptococcus agalactiae) or group A streptococcus/GAS (Streptococcus pyogenes), comprising one of 5483 sequences (S1), given in

New Streptococcus protein for the treatment or prevention of infection or disease caused by Streptococcus bacteria, such as meningitis, and for detecting a compound that binds to the protein -

Claim 1; Page 4148; 4525pp; English.

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A RESOLUT AND PRESENT AND PRES
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24-NOV-2000;
07-MAR-2001;
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                  The invention relates to a protein (ABP25413-ABP30895) from group B streptococcus/GBS (Streptococcus agalactiae) or group A streptococcus/GBS (Streptococcus agalactiae) or group A streptococcus/GBS (Streptococcus progenes), comprising one of 5483 sequences (S1), given in the specification. The proteins have antibacterial and antiinflammatory activity. (I), nucleic acids encoding (I), ABN66044-ABN71526 and
                                                                                                                                                                                Claim 1; Page
                                                                                                                                                                                                                          New Streptococcus protein for the treatment or prevention of infection or disease caused by Streptococcus bacteria, such as meningitis, and for detecting a compound that binds to the protein -
       antibodies
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (CHIR-)
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DB; ABN69506.
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2000GB-0028727.
2001GB-0005640.
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100.0%; Pr
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                                                                                                                                                                              English.
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     used in
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3e+02;
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28-JAN-1999;
29-JAN-1999;
15-FEB-1999;
16-FEB-1999;
      The specification describes Neisseria meningitidis polypeptides designated BASB047, BASB054, BASB058, and BASB069. The polynucleotide sequences can be used to create a vector to transform a host cell. The host cell can be used to produce the polypeptide. The polynucleotide and polypeptides can be used in vaccine compositions. The polynucleotides polypeptides, and antibodies directed against the polypeptides can be used in compositions for preparation of medicaments. The polypeptides can be used in compositions for preparation of medicaments.
                                                                                                                                                                    Neisseria meningitidis
                                                                                                                                 Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the treatment or prevention of infection or disease caused by Streptococcus bacteria, particularly S. agalactiae and S. pyrogenes. Nucleic acids encoding (I) are used to detect Streptococcus in a biological sample. (I) is used to determine whether a compound binds t (I). A composition comprising (I) or a nucleic acid encoding (I), may used as a vaccine or diagnostic composition. The disease caused by Streptococcus that is prevented or treated may be meningitis. Nucleic acid encoding (I) may be used to recombinantly produce (I) and may be used in gene therapy. Antibodies to (I) are used for affinity chromatography, immunoassays, and distinguishing/identifying
                                                                                                                                                          meningitis
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DB; AAA59347.
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99GB-0001944.
99GB-0002086.
99GB-0003417.
99GB-0003535.
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100.0%
                                                                                                                                                                     BASB047, BASB054, BASB068, and BASB069 proteins, meningitidis infections, bacteremia, and
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Pred. No.
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RESULT 13
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The invention relates to a protein (ABP25413-ABP30895) from group B CC streptococcus/GBS (Streptococcus agalactiae) or group A streptococcus/GAS (Streptococcus pyogenes), comprising one of 5483 sequences (S1), given in CC the specification. The proteins have antibacterial and antiinflammatory activity. (I), nucleic acids encoding (I), ABN66044-ABN71526 and cc antibodies that bind (I) are used in the manufacture of medicaments for the treatment or prevention of infection or disease caused by CC Streptococcus bacteria, particularly S. agalactiae and S. pyrogenes. CC Nucleic acids encoding (I) are used to detect Streptococcus in a CC biological sample. (I) is used to detect Streptococcus in a CC (I). A composition comprising (I) or a nucleic acid encoding (I), may be used as a vaccine or diagnostic composition. The disease caused by Streptococcus that is prevented or treated may be meningitis. Nucleic acid encoding (I) may be used to recombinantly produce (I) and may be used in gene therapy. Antibodies to (I) are used for affinity chromatography, immunoassays, and distinguishing/identifying
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24-NOV-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                  Claim 1; Page 3624; 4525pp; English.
                                                                                                                                                                                                                                                                                                                                                                       New Streptococcus protein for the treatment or prevention or disease caused by Streptococcus bacteria, such as menir for detecting a compound that binds to the protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Streptococcus; GAS; GBS; group B streptococcus; Streptococcus agalactiae; group A streptococcus; Streptococcus pyogenes; antibacterial; antiinflammatory; infection; vaccine; meningitis; gene therapy.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       include upper respiratory tract infection, and invasive bacterial diseases such as bacteremia and meningitis. The nucleic acid sequences can be used as probes in the diagnosis of Neisseria meningitidis disease. The present sequence represents a BASB047 polypeptide.
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)B; ABN68355.
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; 2000GB-0028727.
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ilarity 71.4%;
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                                           The sequence data for this patent did not form specification, but was obtained in electronic at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                         The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA sequences (ABL01840-ABL16175) and the encoded proteins
                                                                                                                            sequences (ABL01840 (ABB57737-ABB72072)
  Sequence
                                                                                                                                                                                                                                                                                                                                                         Disclosure; SEQ ID NO 2058; 21pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                 New isolated nucleic acid genes from Drosophila and interactions -
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11-JUL-2000;
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DB; ABL02525.
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Pred. No. 8.7e+02;
0; Mismatches 0;
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Search completed: November 13, 2002, 13:22:09 Job time: 36.7021 secs
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                                                                                                                                                      RESULT 15
AAR99850
                                                                                             Query Match 83.3%; Score 30; DB 17; Length 2701; Best Local Similarity 85.7%; Pred. No. 4.2e+03; Matches 6; Conservative 0; Mismatches 1; Indels
                                                                                                                                                  Sequence 2701 AA;
                                                                                                                                                                      The present sequence represents the amino acid sequence of the human type 2 inositol triphosphate (IP3) receptor. The receptor is useful as a reagent for research on the activity and the mechanism of IP3 and as a Calcium release inhibitor.
                                                                                                                                                                                                                                      Claim 1; Page 4-12; 12pp; Japanese.
                                                                                                                                                                                                                                                              Human type 2 inositol tri:phosphate receptor - used to study activity of inositol tri:phosphate as a calcium release inhibitor
                                                                                                                                                                                                                                                                                                    WPI; 1996-306573/31.
                                                                                                                                                                                                                                                                                                                                                       02-NOV-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IP3; inositol triphosphate; receptor; calcium release inhibitor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human type 3 inositol triphosphate receptor.
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                                                1 ELEDKON 7
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97 ELEQKON 103
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Title:
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2: /cgn2_6/ptodata/1,
3: /cgn2_6/ptodata/1,
4: /cgn2_6/ptodata/1,
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           November 13,
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Maximum Match 100%
Listing first 45 summaries
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           GenCore version 5.1.3 (c) 1993 - 2002 Compugen Ltd
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20.336 Million cell updates/sec
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 US-08-726-306A-183
US-08-134-0011-4601
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US-09-134-011-534A-7
US-08-966-318-5
US-08-987-534A-7
US-08-987-534A-7
US-08-987-534A-30
US-08-98-73-34A-30
US-08-98-742-923A-4
US-08-98-742-923A-4
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US-08-98-742-923A-4
US-08-98-742-93A-4
US-08-98-742-93A-4
US-08-98-742-93A-4
US-08-98-742-93B-34
US-09-370-838-34
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US-08-965-056-111
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   Sequence 183, 18 Sequence 4 App. Sequence 5 App. Sequence 5 App. Sequence 7 App. Sequence 7 App. Sequence 7 App. Sequence 7 App. Sequence 6 App. Sequence 6 App. Sequence 1 App. Sequence 1 App. Sequence 1 App. Sequence 4 App. Sequence 3 App. Sequence 4 Ap
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US-08-726-70...
Sequence 183, Apprix
Sequence 183, Apprix
Patent No. 5958684
GENERAL INFORMATION:
APPLICANT: Van Leeuwen, Frederik Willem
APPLICANT: Burbach, Johannes Peter Henri
APPLICANT: Grosveld, Franklin G.
TITLE OF INVENTION: DIAGNOSIS METHOD AND REAGENTS
NUMBER OF SEQUENCES: 189
CORRESPONDENCE ADDRESS:
ADDRESSE: Banner & Witcoff, Ltd.
"TREET:. 1 Financial Center
                                                                       ; TYPE: amino acid
; STRANDEDNESS: sing
; TOPOLOGY: unknown
; MOLECULE TYPE: pepti
US-08-726-306A-183
                                                                                                                                          PRIOR APPLICATION DATA:

APPLICATION NUMBER: GB 95/20080.4

FILING DATE: 02-Oct-1995

PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 60/009,832

FILLING DATE: 01-Jan-1996

ATTORNEY/AGENT INFORMATION:
NAME: Williams, Ph.D., Kathleen M.
REGISTRATION NUMBER: 96,048-A (?
TELEPOMUNICATION IMPORMATION:
TELEPOMUNICATION THORMATION:
TELEPAX: (617) 345-910

TELEPAX: (617) 345-9111

INFORMATION FOR SEQ ID NO: 183:
SEQUENCE CHARACTERISTICS:
LENGTH: 160 amino acids
TYPE: amino acid
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US-08-726-306A-183
 Query Match
Best Local S
Matches 7
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STREET: MA
COUNTRY: MA
COUNTRY: US
ZIP: 02111
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.4
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WORTPERFECT 6.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/726,306A
ETIING DATE: 02-Oct-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 95/20080.4
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US-09-015-030-1
US-08-819-872A-2
US-09-045-764A-6
US-08-618-911-4
US-08-968-675A-2
US-08-482-847-20
US-08-965-056-79
US-08-965-056-79
US-08-965-056-79
US-08-965-056-80
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Score 36; DB Pred. No. 5; Mismatches
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Best Local Similarity
Matches 5; Conserv
      APPLICANT: Lynn Doucette-Stamm et al TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS ETLE REFERNCE: GTC-007

CURRENT APPLICATION NUMBER: US/09/134,001C

CURRENT FILING DATE: 1998-08-13

PRIOR APPLICATION NUMBER: US 60/064,964

PRIOR APPLICATION NUMBER: US 60/055,779

PRIOR APPLICATION NUMBER: US 60/055,779

PRIOR FILING DATE: 1997-08-14
                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                            Sequence 4601, Application US/09134001C Patent No. 6380370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (515) 248-484
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 158 amino acids
TYPE: amino acid
TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Patentin Rel
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MEDIUM TYPE: Flopy disk
COMPUTER: IBM PC Competible
OPERATING SYSTEM: PC-DOS/MS-DOS
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REGISTRATION NUMBER: 37,444
REFERENCE/DOCKET NUMBER: 36
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STATE: Iowa
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LE OF INVENTION: ALTERATION OF AMINO ACID COMPOSITIONS LE OF INVENTION: SEEDS
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SEQ ID NOS:
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                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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Coughlan, Sean
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GENERAL INFORMATION:

PPLICANT:

Yue, Henry Corley, Neil Shah, Purvi

Bandman, Olga

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5, Application US/08966318

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; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-742-753-2
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Best Local Similarity
"~+~hes 6; Conserv
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; ORGANISM: Staphylococcus epidermidis
US-09-134-001C-4601
 Query Match
Best Local Similarity 71.
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 4601
LENGTH: 196
                                                                                                                           INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
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NENTIM TYPE: Floppy disk
                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: LAZAR, Steven R.
REGISTRATION NUMBER: 32,
                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             VUMBER OF SEQUENCES: 4
                                                                                                                                                                                                                                                  CLASSIFICATION: 514
                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 52
LECOMMUNICATION INFORMATION:
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                                                                                                             LENGTH:
                                                                                                                                                                   TELEPHONE:
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o. 5861278
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                                                                                                amino acid
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                                                                                                             771 amino acids
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SYSTEM: PC-DOS/MS-DOS
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7) 876-5851
NO: 2:
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Pred. No.
               Score 29; |
Pred. No. 5
                          Length 771;
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  Indels
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US-08-966-318-5
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Best Local Similarity /1...
""" hes 5; Conservative
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Patent No.
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NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid
STRANDEDNESS: $1n;
TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBRARY: GenBank
CLONE: 532473
          COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                               CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                       APPLICANT: Bandman, Olga
APPLICANT: Yue, Henry
APPLICANT: Corley, Neil
APPLICANT: Shah, Purvi
TITLE OF INVENTION: HUMAN MYOSIN HEAVY CHAIN-LIKE PROTEINS
NUMBER OF SEQUENCES: 5
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FILING DATE: Filed Herewith
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
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MEDIUM TYPE: Diskett
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                                                                                                                                COUNTRY:
                                                                                                                                                                CITY: Palo Alto
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 APPLICATION NUMBER:
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5, 6197512
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                                                                                                                                USA
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US/09/216,619
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Pred. No.
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Query Match

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Length 419;

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; MOLECULE TYPE: US-08-887-534A-2
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Best Local S
Matches 5
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PATENT NO. 6455323
GENERAL INFORMATION:
APPLICANT: Holden, David W.
TITLE OF INVENTION: ANTI-BACTERIAL METHODS AND MATERIALS
NUMBER OF SEQUENCES: 106
CORRESPONDENCE ADDRESS:
                                                                                               TELEFAX: (312) 474-0448
TELEX: (312) 474-6600
INFORMATION FOR SEQ ID NO:
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INFORMATION FOR SEQ ID NO:
                                         SEQUENCE CHARACTERISTICS:
LENGTH: 419 amino acids
TYPE: amino acid
                                                                                                                                                            REFERENCE/DOCKET NUMBER: 28
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                            FILING DATE:
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Rin-Laures, Li-Hslen
REGISTRATION NUMBER: 33,54
                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/887,534A
                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: PF
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
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IMMEDIATE SOURCE:
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                               TOPOLOGY:
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OPERATING SYSTEM: PC-DOS/MS-DOS
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les 5; Conserv
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STRANDEDNESS: si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
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233 South Wacker Drive/6300 Sears Tower
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71.4%;
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Pred. No. 1.4e+02;
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Best Local S
Matches 5
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Patent No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 419 amino acids
TYPE: amino acid
                                              CORRESPONDENCE ADDRESS:
                                                                          APPLICANT: Claxton, TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 28
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312) 474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Rin-Laures Lit-Hat
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CORRESPONDENCE ADDRESS:
                                                                                                            APPLICANT:
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                                                                                                                                                                                                                                                                                256 ELNDKEN 262
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nes 5; Conserv
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                                  ADDRESSEE:
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                                                                                                                                                                                        Application US/08533306A 5837457
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SEE: Harness, Dickey & Pierce, P.L.C. P.O. Box 828
Bloomfield Hills
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                                                                                                               Liu, Pu
Collins, Francis S.
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                                                                                         Markers for Detection of Chromosome
                                                                          Rearrangements
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71.4%;
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Pred. No. 4.3e+02;
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1; Mismatches 1;
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Best Local Similarity
----hes 5; Conserve
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              INFORMATION FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (810) 641-0270 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Flopy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/742,923A
FILING DATE: NO. 5869611ember 1, 1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         quence 2, Application US/08742923A
tent No. 5869611
                                                       ATTORNEY/AGENT INFORMATION:
NAME: Smith, Deann F.
REGISTRATION NUMBER: 36683
REFERENCE/DOCKET NUMBER: 21
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
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LENGTH: 576 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
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                                                                                                                                    APPLICATION NUMBER: FILING DATE: No. 58 CLASSIFICATION: 435
                             TELEFAX:
                                          TELEPHONE:
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                                                                                                                                                                                                                                                                                         COUNTRY:
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FILING DATE: September 25,
CLASSIFICATION: 435
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                              48303
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(810) 641-000
                             (810)
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O. Box 828
              SEQ ID NO:
                                             (810)
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71.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                     David
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                                                                        2115-00869DVC
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US-08-887-534A-30
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SEQUENCE CHARACTERISTICS:
LENGTH: 729 amin
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Best Local S
Matches 5
                                                                 Sequence 6, Application US/08533306A Patent No. 5837457
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                                                     GENERAL INFORMATION:
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                                       APPLICANT:
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ATTORNEY/AGENT INFORMATION:
NAME: R1n-Laures, L1-Hsien
REGISTRATION NUMBER: 33,54
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les 5; Conserv
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OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                       1 ELEDKON 7
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Claxton,
         Liu, Pu
Collins, Francis S.
Siciliano, Michael J.
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12) 474-0448
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71.4%;
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Pred. No. 7.5e+02;
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Pred. No. 5.
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5.9e+02
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Query Match
Best Local Similarity
Watches 5; Conserve
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                                                                                                                                                                                                                                                                                                                                                                        Patent No.
                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 1
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LENGTH: 816 amino acids
TYPE: amino acid
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NAME: Smith, Deann F.
REGISTRATION NUMBER: 3661
REFERENCE/DOCKET NUMBER:
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                        APPLICANT: Siciliano, APPLICANT: Claxton, D
                                                                                                                                                                                                                                                                TITLE OF INVENTION:
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APPLICANT: Siciliano, Michael J.
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           APPLICATION NUMBER: FILING DATE: No. 5
                                                                                                                                     COUNTRY: UZIP: 48303
                                                                                                                                                                                   CITY: Bloomfield Hills
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CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/
FILING DATE: September 25,
CLASSIFICATION: 435
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5. 5869611
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O. Box 828
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           R: US/08/742,923A
5869611ember 1, 19
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71.4%;
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Pred. No. 8.4e+02;
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ATTORNEY/AGENT INFORMATION:

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ID NO:

ACTERISTICS:

885 amino acids

ACTERISTICS:

12E: amino acids

TOPOLOGY: linear

MOLECULE TYPE: prof

US-08-533-306A-4

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LENGTH: 816 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-742-923A-6
                                                                                                                                                                                                                                                                                                    COMPUTER: ISA PC COMPATIBLE

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/533,306A

FILING DATE: September 25, 10^-

CLASSIFICATION: 435

ATTORNEY/AGENT - 435
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Best Local Similarity 71.4
Matches 5; Conservative
                                                            Matches
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                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
TELEPHONE: (810) 641-1600
TELEPAX: (810) 641-0270
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: Smith, Deann F.
REGISTRATION NUMBER: 36683
REFERENCE/DOCKET NUMBER: 2:
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APPLICANT: Claxton, David
TITLE OF INVENTION: Marker
TITLE OF INVENTION: Rearry
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REFERENCE/DOCKET NUMBER: 21
TELECOMMUNICATION INFORMATION:
551 ELEDERN 557
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CITY: Dlomfield Hills
STATE: MI
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                            1 ELEDKON 7
                                                          Local Similarity
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Siciliano, Michael J.
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71.4%;
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71.4%;
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                                                                     Score 28; L
Pred. No. 9.
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Pred. No. 8.4e+02;
2; Mismatches 0
                                                          Mismatches
                                                                                      DB 2;
                                                                       1e+02
                                                       0; Indels
                                                                                   Length 885;
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Search completed: November 13, Job time : 11.1277 secs

2002, 13:18:07

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                                                                                                                                  ; MOLECULE TYPE: protein US-08-742-923A-4
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US-08-742-923A-4
                                                                Query Match 77.8%;
Best Local Similarity 71.4%;
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 4, Application US/08742923A Patent No. 5869611
                                                                                                                                                                                             TELEFAX: (810) 641-0270
INFORMATION FOR SEQ ID NO: 6
SEQUENCE CHARACTERISTICS:
LENGTH: 885 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                         CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Smith, Deann F.
REGISTRATION NUMBER: 36683
REGISTRATION NUMBER: 2115-00869DVC
                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Re-Lease #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/742,923A
FILING DATE: NO. 5869611ember 1, 1996
CLASSIFICATION: 435
                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 21
TELECOMMUNICATION INFORMATION:
TELEPHONE: (810) 641-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
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551 ELEDERN 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ITLE OF INVENTION:
                                                                                                                                                                LENGTH: 885 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                             TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Harness, Div
STREET: P.O. Box 828
CITY: Bloomfield Hills
                               1 ELEDKON 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Harness, Dickey & Pierce, P.L.C. O. Box 828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rearrangements
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Markers for Detection of Chromosome 16
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                                                              Score 28; DB Pred. No. 9.1e 2; Mismatches
                                                       лв <u>г</u>
7.1e+02;
0;
                                                                                                 DB 2;
                                                                                            Length 885;
                                                              0
                                                              Gaps
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Title: Perfect score: Sequence:

US-09-856-086-4 36

ELEDKON 7

OM protein

Copyright

Scoring table:

Database

Minimum DB seq Maximum DB seq

length:

2000000000

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. 1s the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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22.121 Million cell updates/sec
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// cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
// cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*
// cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*
// cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
// cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
// cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
// cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
// cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
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            10 US-09-815-242-5318

10 US-09-815-242-12459

10 US-09-815-242-13142

10 US-09-815-242-13142

10 US-09-864-761-42114

10 US-09-864-761-48919

10 US-09-864-761-48919

10 US-09-864-761-48919

10 US-09-9815-242-12154

10 US-09-9815-242-12154

10 US-09-815-242-12154

10 US-09-815-242-11218

10 US-09-981-5242-11218

10 US-09-981-5242-11218

10 US-09-989-723-62

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         Sequence 2, Ag
Sequence 62, Ag
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Sequence
Sequence
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Sequence
         12409, Ap
12752, A
111342, A
111342, A
11134, A
48919, A
48919, A
1697, Ap
12154, A
                                            FILLE REFERENCE: ELITRA.011A

FILE REFERENCE: US/09/815,242

CURRENT APPLICATION NUMBER: US/09/815,242

CURRENT FILING DATE: 2001-03-21

PRIOR APPLICATION NUMBER: 60/291,078

PRIOR FILING DATE: 2000-03-21

PRIOR FILING DATE: 2000-05-23

PRIOR APPLICATION NUMBER: 60/207,727

PRIOR APPLICATION NUMBER: 60/242,578

PRIOR APPLICATION NUMBER: 60/242,578

PRIOR APPLICATION NUMBER: 60/253,625

PRIOR FILING DATE: 2000-10-23

PRIOR FILING DATE: 2000-12-22

PRIOR APPLICATION NUMBER: 60/257,931

PRIOR APPLICATION NUMBER: 60/269,308

PRIOR APPLICATION NUMBER: 60/269,302

PRIOR APPLICATION NUMBER: 60/269,302

      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 5318, Application US/09815242 Patent No. US20020061569A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Carr, Grant J.
APPLICANT: Yamamoto, Robert T.
APPLICANT: Xu, H. Howard
TITLE OF INVENTION: Identification of Essential Genes
TITLE OF INVENTION: Prokaryotes
FILE REFERENCE: ELITER.011A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari L.
APPLICANT: Zyskind, Judith W
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Trawick, John D.
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Zyskind, Judith W
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      80.6%;
85.7%;
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10 US-09-991-073-62
110 US-09-991-163-62
110 US-09-991-163-62
110 US-09-993-604-62
110 US-09-993-721-62
110 US-09-993-721-62
110 US-09-986-761-4621
110 US-09-9864-761-48621
110 US-09-864-761-48621
110 US-09-864-761-48959
110 US-09-864-761-48959
110 US-09-815-242-12872
110 US-09-815-242-12872
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110 US-09-815-342-13146
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110 US-09-815-342-13146
110 US-09-815-342-13146
110 US-09-918-93-34
110 US-09-918-93-34
110 US-09-918-93-4
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DB
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14, Appli
14, Appli
38875, A
445621, A
465421, A
46959, A
1006, App
12872, Ap
12872, App
12872, Appli
120, Appli
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4, Appli
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Result

Score

Query Match

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52

Matches

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; ORGANISM: Staphylococcus aureus US-09-815-242-12409
                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                    APPLICANT:
                                                                                                                                                                                                                                 09-815-242-12752
equence 12752, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 14110
SOFTWARE: FastSEQ for Windows Version 4.0
EQ ID NO 12409
                                                                                                                                                                                       tent No. US20020061569A1
NERAL INFORMATION:
                                                                                                                                                                                      PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ITLE OF INVENTION: Identification of Essential Genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RRENT APPLICATION NUMBER: US/09/815,242 RRENT FILING DATE: 2001-03-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OR APPLICATION NUMBER: 60/191,078
OR FILING DATE: 2000-03-21
OR APPLICATION NUMBER: 60/206,848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E REFERENCE: ELITRA.011A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ence 12409, Application US/09815242 nt No. US20020061569A1
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nes 6; Conserv
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                                                                                                                                                                                                                                                                                                                                                  1 ELEDKQN 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 2000-09
APPLICATION NUMBER:
FILING DATE: 2000-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/269,308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 2000-11-27
APPLICATION NUMBER: 60/257,931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 2000-10-23
APPLICATION NUMBER: 60/253,625
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                                  INVENTION: Identification of Essential Genes in INVENTION: Prokaryotes
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                                                                   Wall, Daniel
Trawick, John D.
Carr, Grant J.
Yamamoto, Robert T.
Xu, H. Howard
                                                                                                                                                                                  Haselbeck, Robert
                                                                                                                                                Ohlsen, Kari L.
Zyskind, Judith W.
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Zyskind, Judith W.
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INTION: Prokaryotes
IE: ELITRA.011A
ICATION NUMBER: US/09/815,242
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Kamamoto, Robert T
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85.7%;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
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27;
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                                                                                                                                                                                                                                                                                                                                                                                                                Length 189;
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                                  ; ORGANISM: Staphylococcus aureus US-09-815-242-13142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Staphylococcus aureus US-09-815-242-12752
                                                                   NUMBER OF SEQ ID NO
SOFTWARE: FASTSEQ I
SEQ ID NO 13142
LENGTH: 189
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 4
US-09-815-242-13142
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Best Local
     Query Match
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Patent No. US20020061569A1
                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Xu, H. Howard
TITLE OF INVENTION: Identification of Essential Genes in
TITLE OF INVENTION: Prokaryotes
FILE REFERENCE: ELITER.011A
CURRENT APPLICATION NUMBER: US/09/815,242
CURRENT FILING DATE: 2001-03-21
CURRENT FILING DATE: 2001-03-21
                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR FILING DATE: 2000-03-21
                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/269,308
                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
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Local Similarity 85.7%;
les 6; Conservative
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                                                                                                                                                                                                                               APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/269,308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/207,727 FILING DATE: 2000-05-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
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                                                                                                                                                                                                                                                    LING DATE: 2000-10-23
                                                                                                                                                                                    PLICATION NUMBER: 60/2
                                                                                                                                                                                                                                                              PLICATION NUMBER: 60/207,727
LING DATE: 2000-05-26
PLICATION NUMBER: 60/242,578
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FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Haselbeck, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Carr, Grant J.
Yamamoto, Robert T.
Xu, H. Howard
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Zyskind, Judith W.
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                                                                                                                 NOS: 14110
) for Windows Version 4.0
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ER: 60/191,078
     80.6%; Score 29;
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                                                                                                                                                                                                                                 60/253,625
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Pred. No.
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     DB 10;
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RESULT 6
US-09-864-761-42114
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: Sequence 1113, Application US/09764877

: Patent No. US20020147140A1
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APPLICANT: ROSED et al.
APPLICANT: ROSED et al.
TITLE OF INVENTION: Nucleic Acids, Proteins,
EILE REFERENCE: PC005
CURRENT APPLICATION NUMBER: US/09/764,877
CURRENT FILING DATE: 2001-01-17
CURRENT FILING DATE: 2001-01-17
                                                  APPLICANT: HANSAL DAVID K.

APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Acomica-x-1
CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR FILING DATE: 2000-05-26
PRIOR PILING DATE: 2000-05-26
PRIOR PILING DATE: 2000-05-26
PRIOR PILING DATE: 2000-05-26
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Matches
                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR FILING DATE: 2000-10-04
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR FILING DATE: 2000-09-27
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                             APPLICATION NUMBER: PCT/US01/00665
FILING DATE: 2001-01-30
                                                                                                                                                APPLICATION NUMBER: PCT/US01/00666
FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00667
FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 09/632,366 FILING DATE: 2000-08-03
          APPLICATION NUMBER: PCT/US01/00668
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5; Conserv
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Pred. No.
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PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR APPLICATION NUMBER: GB 24263.6
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PRIOR APPLICATION NUMBER: PCT/US01/00670
PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR FILING DATE: 2000-09-21
PRIOR APPLICATION NUMBER: US 09/608,408
PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
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Best Local
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                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/864,761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Penn, Sharron G.
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PRIOR APPLICATION NUMBER: PCT/US01/00662
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PRIOR APPLICATION NUMBER: PCT/US01/00661
PRIOR FILING DATE: 2001-01-30
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10 ELEDROS 16
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                                                                                              APPLICATION NUMBER: PCT/US01/00666
FILING DATE: 2001-01-30
                                                                                                                                    APPLICATION NUMBER: US 60/236,359 FILING DATE: 2000-09-27
                                                          APPLICATION NUMBER: PCT FILING DATE: 2001-01-30
                  APPLICATION NUMBER: PCT/US01/00664
FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00669
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Hanzel, David K.
Chen, Wensheng
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EXPRESSED
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EXPRESSED IN ADULT LIVER, SIGNAL = EXPRESSED IN FETAL LIVER, SIGNAL = 1.8

EXPRESSED IN HEART, SIGNAL = 1.8
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71.4%;
                                                                             PCT/US01/00667
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Pred. No. 26;
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; OTHER INFORMATION: EXPRESSED IN BT474, SIGNAL = 1.1
; OTHER INFORMATION: SWISSPROT HIT: P28167, EVALUE 8.00e-22
; OTHER INFORMATION: EST_HUMAN HIT: AW663888.1, EVALUE 4.00e-98
US-09-864-761-48919
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                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 18
SOFTWARE: PatentIn Ver.
SEQ ID NO 1697
LENGTH: 272
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                    LOCATION: (258)
OTHER INFORMATION: )
NAME/KEY: SITE
LOCATION: (262)
OTHER INFORMATION: )
                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/925,300 CURRENT FILING DATE: 2001-08-10 PRIOR APPLICATION NUMBER: PCT/US00/05988 PRIOR FILING DATE: 2000-03-08
                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/124,270 PRIOR FILING DATE: 1999-03-12
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lequence 1697, Application US/09925300
latent No. US20020151681A1
EMERAL INFORMATION:
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APPLICANT: Steve Ruben
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                                                                                                                                                            NAME/KEY: SITE
LOCATION: (256)
OTHER INFORMATION: Xaa
                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
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                                                                                                                                               NAME/KEY: SITE
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ITLE OF INVENTION: Nucleic Acids, Proteins
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175 DLEDKQS 181
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nes 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 60/234,687 FILING DATE: 2000-09-21 APPLICATION NUMBER: US 09/608,408 FILING DATE: 2000-06-30 APPLICATION NUMBER: US 09/774,203 FILING DATE: 2001-01-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: PCT/US01/00663 FILING DATE: 2001-01-30
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                                                    Xaa
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Xaa equals any of the naturally occurring L-amino acids
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                                                  the naturally occurring L-amino acids
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49;
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                                                                                                         L-amino
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RESULT 10
US-09-815-242-12154
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                                                                  GENERAL
                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Fas
SEQ ID NO 5273
                                                                              Sequence 12154, Application US/09815242 Patent No. US20020061569A1
                                                                                                                                                                                                                                          Matches
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Best Local
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Best Local :
                                  APPLICANT:
                                                APPLICANT: Haselbeck, Robert
                     APPLICANT:
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CURRENT FILING DATE: 2001-03-21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR ETITING DATE: 2000-05-25
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                                                                                                                                                                           256 ELNDKEN 262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              193 EAEDKEN 199
                                                                                                                                                                                                                                        Local Similarity
nes 5; Conserv
                                                                                                                                                                                                          1 ELEDKON 7
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APPLICATION NUMBER: 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/253,625
                                                                  INFORMATION
Ohlsen, Kari L.
Zyskind, Judith W.
Wall, Daniel
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Carr, Grant J.
Yamamoto, Robert T.
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                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                   for Windows Version
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                                                                                                                                                                                                                                                      77.8%;
71.4%;
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Pred. No. 1e+02;
1; Mismatches 1
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Pred. No.
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65;
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RESULT 12
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; TYPE: PRT
; ORGANISM: Staphylococcus aureus
US-09-932-474-2
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CURRENT APPLICATION NUMBER: US/09/815,242
CÜRRENT FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: 60/2191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR PILING DATE: 2000-05-26
PRIOR FILING DATE: 2000-05-26
PRIOR FILING DATE: 2000-05-26
                                                                                                                                        Matches
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PRIOR APPLICATION NUMBER: US 60/226,239
PRIOR FILING DATE: 2000-08-17
PRIOR APPLICATION NUMBER: US 60/226,269
PRIOR FILING DATE: 2000-08-17
NUMBER OF SEC TO NO.
                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/932,474
CURRENT FILING DATE: 2001-08-17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PPLICANT: PRINCE, Donald Bryan
TILE OF INVENTION: CRYSTALLIZATION AND STRUCTURE DETERMINATION OF FEMA AND FEMA-LIKITIE OF INVENTION: PROTEINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 ELEDKQN 7
|| ||:|
256 ELNDKEN 262
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                                                       256 ELNDKEN 262
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IOR FILING DATE: 2000-12-22
IOR APPLICATION NUMBER: 60/:
IOR FILING DATE: 2001-02-16
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OR FILING DATE: 2000-10-23
OR APPLICATION NUMBER: 60/253,625
OR FILING DATE: 2000-11-27
                                                                                                                                    Local Similarity les 5; Conserv
                                                                                                                                                                                                                                                                                                              WARE: PatentIn version 3.0
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LE OF INVENTION: Identification of Essential Genes in LE OF INVENTION: Prokaryotes
                                                                                               1 ELEDKQN 7
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Local Similarity 71.4%;
es 5; Conservative
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IS20020072105A1
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Pred. No.
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Pred. No.
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          ; ORGANISM: Haemophilus influenzae US-09-815-242-11218
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PRIOR APPLICATION NUMBER: 60/214,047
PRIOR PRIOR APPLICATION NUMBER: 60/214,047
PRIOR FILING DATE: 2000-06-26
NUMBER OF SEQ ID NOS: 150
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 62
LEMGTH: 529
TYPE: PRT
ORGANISM: Homo sapiens
US-09-888-615-62
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Best Local Similarity
"---hes 5; Conserv
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                                                                                                                                                                                                                                                                     TITLE OF INVENTION: Identification of Essential Genes in TITLE OF INVENTION: Prokaryotes FILE REFERENCE: ELITRA.011A CURRENT APPLICATION NUMBER: US/09/815,242 CURRENT FILING DATE: 2001-03-21 PRIOR APPLICATION NUMBER: 60/191,078 PRIOR FILING DATE: 2000-03-21
                                    PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 2001-0
                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/242,578
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PRIOR FILING DATE: 2000-05-23
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CURRENT FILING DATE: 2001-06-26
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TITLE OF INVENTION: NOVEL PROTEASES
FILE REFERENCE: 038602/1214
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                                                                           APPLICATION NUMBER: 6 FILING DATE: 2000-12-
                                                                                                                  APPLICATION NUMBER: 60/253,625 FILING DATE: 2000-11-27
                                                                                                                                                         FILING DATE: 2000-10-
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FastSEQ for Windows Version
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Zyskind, Judith W.
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Trawick, John D.
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71.4%;
                                                                                              60/257,931
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Pred. No.
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1.3e+02;
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PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILLING DATE: 1997-06-16
PRIOR FILLING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILLING DATE: 1997-11-12
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILLING DATE: 1997-11-13
PRIOR FILLING DATE: 1997-11-13
PRIOR FILLING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066370
PRIOR APPLICATION NUMBER: 60/066770
PRIOR FILLING DATE: 1997-11-24
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Best Local S
Matches 5
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Sequence 62, Application US/09992598
Patent No. US20020160384A1
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APPLICANT: Wood, William I.
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2730p1C20
FILE REFERENCE: P2730p1C20
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  OR FILING DATE: 1998-05-28
OR APPLICATION NUMBER: 60/087607
OR FILING DATE: 1998-06-02
OR APPLICATION NUMBER: 60/087609
OR FILING DATE: 1998-06-02
OR APPLICATION NUMBER: 60/087759
OR FILING DATE: 1998-06-02
OR APPLICATION NUMBER: 60/087827
OR APPLICATION NUMBER: 60/087827
OR APPLICATION NUMBER: 60/088021
                                                                                                                                                                                           OR FILING DATE: 1998-03-20

R APPLICATION NUMBER: 60/083322

OR FILING DATE: 1998-04-28

OR APPLICATION NUMBER: 60/084600

OR FILING DATE: 1998-05-07

OR APPLICATION NUMBER: 60/087106
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FILING DATE: 1998-02-25
APPLICATION NUMBER: 60/078910
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Williams, P. Mickey
Wood, William I.
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Roy, Margaret Ann
Stewart, Timothy A.
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Kljavin,Ivar J.
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71.4%;
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Pred. No. 1.7e+02;
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R FILLING DATE: 1998-06-10

PR PELLING DATE: 1998-06-10

PR APPLICATION NUMBER: 60/088810

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PR APPLICATION NUMBER: 60/088824

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PR APPLICATION NUMBER: 60/088826

PR APPLICATION NUMBER: 60/088826
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APPLICATION NUMBER: 60/0
FILING DATE: 1998-06-18
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FILING DATE: 1998-06-1
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APPLICATION NUMBER: 60/088734
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APPLICATION NUMBER: 60/088326
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OR FILING DATE: 1998-06-22

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OR APPLICATION NUMBER: 60/090355

OR FILING DATE: 1998-06-23

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OR FILING DATE: 1998-06-24

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Pred. No. 2e+02;
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US-09-989-722-62
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CURRENT FILING DATE: 2001-11-19
PRIOR APPLICATION NUMBER: 60/049787
PRIOR FILING DATE: 1997-06-16
PRIOR APPLICATION NUMBER: 60/062250
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FILING DATE: 1997-11-24
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Baker, Kevin P.
Botstein, David
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Stewart, Timothy
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Grimaldi, J. Christopher
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Gerritsen, Mary E.
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Eaton, Dan L.
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APPLICATION NUMBER: 60/ FILING DATE: 1998-07-09

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NUMBER: 60/091978: 1998-07-07 NUMBER: 60/091982 : 1998-07-07 NUMBER: 60/092182

APPLICATION NUMBER: 60/091626

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OR APPLICATION NUMBER: 60/091360
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OR APPLICATION NUMBER: 60/091478
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PREPLICATION NUMBER: 60/990676

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OR APPLICATION NUMBER: 60/089440
OR FILING DATE: 1998-06-16
OR APPLICATION NUMBER: 60/089512
OR FILING DATE: 1998-06-16
OR APPLICATION NUMBER: 60/089514
OR APPLICATION NUMBER: 60/089532
OR FILING DATE: 1998-06-17
OR APPLICATION NUMBER: 60/089538
OR FILING DATE: 1998-06-17
OR APPLICATION NUMBER: 60/089599
OR FILING DATE: 1998-06-17
OR APPLICATION NUMBER: 60/089599
OR FILING DATE: 1998-06-17
OR APPLICATION NUMBER: 60/089600
OR FILING DATE: 1998-06-17
OR APPLICATION NUMBER: 60/089601
OR APPLICATION NUMBER: 60/089601
OR APPLICATION NUMBER: 60/089601
OR APPLICATION NUMBER: 60/089801
OR APPLICATION NUMBER: 60/089907
OR APPLICATION NUMBER: 60/089907
OR APPLICATION NUMBER: 60/089907
OR APPLICATION NUMBER: 60/089907
OR APPLICATION NUMBER: 60/089908

APPLICATION NUMBER: 60/089952
FILING DATE: 1998-06-19
APPLICATION NUMBER: 60/090246
FILING DATE: 1998-06-22
APPLICATION NUMBER: 60/090252

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1998-06-22 UMBER: 60/090254 OR APPLICATION NUMBER: 60/088734
OR FILING DATE: 1998-06-10
OR APPLICATION NUMBER: 60/088738
OR FILING DATE: 1998-06-10
OR APPLICATION NUMBER: 60/088742
OR FILING DATE: 1998-06-10
OR APPLICATION NUMBER: 60/088810
OR FILING DATE: 1998-06-10
OR FILING DATE: 1998-06-10
OR APPLICATION NUMBER: 60/088824
OR FILING DATE: 1998-06-10
OR APPLICATION NUMBER: 60/088824
OR FILING DATE: 1998-06-10
OR APPLICATION NUMBER: 60/088826
OR FILING DATE: 1998-06-10
OR APPLICATION NUMBER: 60/088826
OR FILING DATE: 1998-06-10

DR APPLICATION NUMBER: 60/088167
DR FILLING DATE: 1998-06-05
DR APPLICATION NUMBER: 60/088202
DR FILLING DATE: 1998-06-05
DR APPLICATION NUMBER: 60/088212
DR FILLING DATE: 1998-06-05

APPLICATION NUMBER: 60/088033 FILING DATE: 1998-06-04 APPLICATION NUMBER: 60/088326 FILING DATE: 1998-06-04

FILING

1998-06-04 NUMBER: 60/088030 1998-06-04

FILING DATE: 1998-06-05
APPLICATION NUMBER: 60/088655
FILING DATE: 1998-06-09

APPLICATION NUMBER: 60/088217

DR APPLICATION NUMBER: 60/088858
DR FILLING DATE: 1998-06-11
DR APPLICATION NUMBER: 60/088861
DR FILLING DATE: 1998-06-11
DR APPLICATION NUMBER: 60/088876
DR FILLING DATE: 1998-06-11

APPLICATION NUMBER: 60/089105 FILING DATE: 1998-06-12

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Result
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Maximum DB seq
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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length: 2000000000
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36
1 ELEDKQN 7
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Gapop 10.0 , Gapext 0.5
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/cgn2_6/ptodata/1/paa/US086_COMB.pep:*
/cgn2_6/ptodata/1/paa/US086_COMB.pep:*
/cgn2_6/ptodata/1/paa/US088_COMB.pep:*
/cgn2_6/ptodata/1/paa/US089_COMB.pep:*
/cgn2_6/ptodata/1/paa/US090_COMB.pep:*
/cgn2_6/ptodata/1/paa/US000_COMB.pep:*
/cgn2_6/ptodata/1/paa/US000_COMB.pep:*
/cgn2_6/ptodata/1/paa/US000_COMB.pep:*
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'cgn2_6/ptodata/1/paa,
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 US-09-834-366-15179

US-60-197-873-15179

US-09-791-537-14762

US-09-791-537-92908

US-09-791-537-125497

US-10-205-331-57
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15179,
15179,
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92908,
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	equence 6328,	equence 98141,	equence 8833,	equence 16191,	equence 16191,	equence 1036,	equence 965	equence 25817,	equence 25818,	uence 25819,	Sequence 2640,	quence 829,	equence 830, App	equence 11132,	equence 22371,	equence 631, Ap	equence 2526	equence 31873,	equence 22035,	equence 32301,	equence 5052, A	equence 64811,	equence 3006, A	equence 24949,	equence 52877,	equence 528	equence 52879,	equence 9492, A	equence 9493. A	equence 9494. A	equence 11952,	equence 9066	equence 18635,	equence 94465,	equence 125495,	equence 86802,	quenc	equence 34475,	equence 3132, A

ALIGNMENTS

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APPLICANT: Giordano, Jean-Yves
ITILE OR INVENTION: ESTS and Encoded Human Proteins.
FILE REFERENCE: 81.US2.REG
CURRENT APPLICATION NUMBER: US/09/834,366
CURRENT APPLICATION NUMBER: US/09/834,366
CURRENT FILING DATE: 2001-04-13
PRIOR APPLICATION NUMBER: US 60/197,873
PRIOR FILING DATE: 2000-04-18
NUMBER OF SEQ ID NOS: 52153
SOFTWARE: Patent.pm
SEQ ID NO 15179
LENGTH: 141
TYPE: PRT
                                                                ORGANISM: Homo sapiens
FEATURE:
AAME/KEY: UNSURE
LOCATION: 21
OTHER INFORMATION: Xaa = Gly, Arg
US-09-834-366-15179
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  Query Match 100.0%;
Best Local Similarity 100.0%;
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  Score 36;
Pred. No.
40;
                        22;
                      Length 141;
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Gaps

0

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RESULT 4
US-09-791-537-92908
; Sequence 92908, Application US/09791537
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SEQ ID NO 14762
LENGTH: 282
TYPE: PRT
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SOFTWARE: Patent.pm
SEQ ID NO 15179
LENGTH: 141
                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Danzer, Joseph TITLE OF INVENTION: THREE I TITLE OF INVENTION: METHOI FILE REFERENCE: 261/210
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CURRENT APPLICATION NUMBER: US/60/197,873
CURRENT FILING DATE: 2000-04-18
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TITLE OF INVENTION: ESTS and Encoded Human Proteins.
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APPLICANT: Tanaka, Hiroaki
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ORGANISM: Homo sapiens
FEATURE:
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57 ELEDKQN 63
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nes 7; Conserv
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                                                                                                                                                                   Similarity
7; Conserv
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llarity 100.0%;
Conservative 0
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Pred. No. 97;
0; Mismatches
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Pred. No.
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                                                                                                                                                                                             Length 282;
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; APPLICANT: Brooksbank, Robert
; APPLICANT: Pinnock, Robert
; TITLE OF INVENTION: Identification and Use of
; FILE REFERENCE: WL-A-018199
; CURRENT APPLICATION NUMBER: US/10/205,331
; CURRENT FILING DATE: 2002-07-24
; PRIOR APPLICATION NUMBER: GB 0118354.0
; PRIOR FILING DATE: 2001-07-27
; NUMBER OF SEQ ID NOS: 117
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 57
                                                                                                                                                                                                                                   US-10-205-331-57

Sequence 57, Application US/10205331

GENERAL INFORMATION:
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SOFTWARE: Patentin vers
SEQ ID NO 125497
LENGTH: 542
TYPE: PRT
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Best Local
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Sequence 125497, Application US/09791537
GENERAL INFORMATION:
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SEQ ID NO 92908
LENGTH: 542
TYPE: PRT
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                                                                                                                                                                                      APPLICANT: Warner-Lambert Company APPLICANT: Lee, Kevin APPLICANT: Dixon, Alistair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Bionomix, Inc.
APPLICANT: Debe, Derek
APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
APPLICANT: DEBE DESCRIPTION: METHODS OF USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: 261/210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
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CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
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APPLICANT: Debe, Derek
APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
                                                                                                                                                                                                                                                                                                                                        336 ELEDKON 342
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Pred. No. 2.2e+02;
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Pred. No.
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Best Local Similarity
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US-09-611-526-3132
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: Sequence 3132, Application US/09611526
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FEATURE:
OTHER INFORMATION: NF-L
US-10-205-331-57
                                                                                                                          Sequence 34475, Application US/09791537 GENERAL INFORMATION:
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SEQ ID NO 3132
LENGTH: 543
TYPE: PRT
       FILE REFERENCE: 261/210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
                                           APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBER
TITLE OF INVENTION: METHODS OF USE THEREOF
                                                                                                                                                       09-791-537-34475
                                                                                             APPLICANT:
                                                                                            PPLICANT: Bionomix, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 4484
                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: JP 2000-183765
PRIOR FILING DATE: 2000-05-02
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RIOR FILING DATE: 1999-07-08
RIOR APPLICATION NUMBER: JP 2000-118774
RIOR FILING DATE: 2000-01-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ILE REFERENCE: 08335/0122
URRENT APPLICATION NUMBER: US/09/611,526
URRENT FILING DATE: 2000-07-07
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Local Similarity 100.0%;
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KOJIMA, SHINICHI
OTSUKI, TETSUJI
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WAKAMATSU, AI
SUGIYAMA, TOMOYASU
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ISOGAI, TAKAO
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US-09-791-537-86802
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Best Local S
Matches 7
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336 ELEDKQN 342
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; ORGANISM: Homo sapiens US-09-791-537-86802
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                                                                                                               NUMBER OF SEQ ID NOS: 153055
SOFTWARE: PatentIn version 3.0
SEQ ID NO 86802
LENCTH: 544
TYPE: PRT
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CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: PatentIn version 3.0
SEQ ID NO 56903
LENGTH: 543
TYPE: PRT
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                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
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TITLE OF INVENTION: THREE I
TITLE OF INVENTION: METHOI
FILE REFERENCE: 261/210
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APPLICANT: Debe, Derek
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TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
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Score 36; DB 21;
Pred. No. 2.2e+02;
Mismatches 0;
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Pred. No. 2.2e+02;
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Pred. No. 2.2e+02;
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US-09-791-537-94465
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Best Local Similarity
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US-09-791-537-125495
(Sequence 125495, Application US/09791537
(SERERAL IMPORMATION:
(GENERAL IMPORMATION:
APPLICANT: Bionomix, Inc.
APPLICANT: Bobe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
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US-09-791-537-125495
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Best Local
         APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBI
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
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TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
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equence 94465, Application US/09791537
ENERAL INFORMATION:
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Pred. No. 2.2e+02;
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Pred. No. 2.3e+02;
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Search completed: November Job time: 141.447 secs
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US-10-155-881-11952
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US-09-540-209B-9066
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; ORGANISM: Bos taurus
US-09-791-537-18635
                                                                                                                                                               TITLE OF INVENTION: NUCLEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED WITH TITLE OF INVENTION: TRANSCRIPTION IN PLANTS
FILE REFERENCE: 38-21(15300)J
CURRENT APPLICATION NUMBER: US/10/155,881
CURRENT FILING DATE: 2002-05-22
NUMBER OF SEQ ID NOS: 37595
SEQ ID NO 11952
LENGTH: 368
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CURRENT APPLICATION NUMBER: US/09/540,209B
CURRENT FILING DATE: 2000-04-04
NUMBER OF SEQ ID NOS: 10444
SEQ ID NO 9066
LENGTH: 1175
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GENERAL INFORMATION:
APPLICANT: Gary L. 1
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LENGTH: 555
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Best Local :
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APPLICANT: Kovalic, David K.
APPLICANT: Liu, Jingdong
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276 ELEDKEN 282
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McIninch, James
                                                         Conservative
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Pred. No. 5.6e
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Pred. No. 1.5e+03;
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Perfect score:
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2: /cgn2_6/ptodata/1/paa/U

3: /cgn2_6/ptodata/1/paa/U

4: /cgn2_6/ptodata/1/paa/U

5: /cgn2_6/ptodata/1/paa/U

6: /cgn2_6/ptodata/1/paa/U

7: /cgn2_6/ptodata/1/paa/U
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36
1 ELEDKQN 7
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Maximum Match 100%
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/cgn2_6/ptodata/1/paa/US06_NEW_COMB.pep:*
/cgn2_6/ptodata/1/paa/US07_NEW_COMB.pep:*
/cgn2_6/ptodata/1/paa/US08_NEW_COMB.pep:*
/cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep:*
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     US-09-856-086-4
US-09-513-99C-6211
US-10-092-411A-4601
US-10-131-813A-392
US-10-131-813A-392
US-10-131-82A-392
US-10-131-82A-392
US-10-131-82A-392
US-10-127-83A-392
US-10-131-833A-392
US-10-131-833A-392
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29.431 Million cell updates/sec
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Compugen Ltd
     Sequence
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     8 4, App11
9 4601, Ap
9 4601, Ap
9 392, App
392,
                                                                                       Sequence 6211, Application US/09513999C

GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Duclert, A.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags and
FILE REFERENCE: 59.US2.REG
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR ETLING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 6211
LENGTH: 103
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: EBRINGER, ALAN
TITLE OF INVENTION: DIAGNOSIS OF DEMYELINATING OR
FILE REFERENCE: 73104.040
CURRENT APPLICATION UNMBER: US/09/856,086
CURRENT FILING DATE: 2001-07-30
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.1
SEQ ID NO 4
LENGTH: 7
TYPE: PRT
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US-09-513-999C-6211
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US-09-856-086-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 7
 ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: UNSURE
LOCATION: 90
OTHER INFORMATION: X8a-1
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1 ELEDKQN 7
INFORMATION: Xaa-Leu or
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Similarity 100.0%;
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US-10-128-685A-392
US-10-128-690A-392
US-10-128-693A-392
US-10-131-826A-392
US-10-131-826A-392
US-10-137-872A-392
US-10-137-872A-392
US-10-125-921A-392
US-10-127-824A-392
US-10-127-824A-392
US-10-127-824A-392
US-10-127-832A-392
US-10-127-832A-392
US-10-127-832A-392
US-10-127-832A-392
US-10-127-830A-392
US-10-127-834A-392
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US-10-127-834A-392
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Pred. No. 3.8
0; Mismatches
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RESULT 4
US-10-131-813A-392
Sequence 392, Application US/10131813A
GENERAL INFORMATION:
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; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-4601
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GENERAL INFORMATION;
APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION; NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
FILE REFERENCE: 032796-101
CURRENT APPLICATION NUMBER: US/10/092,411A
CURRENT FILING DATE: 2002-03-07
PRIOR APPLICATION NUMBER: US 09/134,001
PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR FILING DATE: 1997-08-14
NUMBER OF SEQ ID NOS: 5676
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TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P330R1C139
CURRENT APPLICATION NUMBER: US/10/131,813A
CURRENT FILING DATE: 2002-04-24
PRIOR APPLICATION NUMBER: 60/049911
PRIOR APPLICATION NUMBER: 60/04991
PRIOR APPLICATION NUMBER: 60/056974
PRIOR APPLICATION NUMBER: 60/056974
PRIOR FILING DATE: 1997-08-26
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Wood, William
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Gurney, Austin L.
                                                                                                                                                                                                                                                                                                   Sherwood, Steven
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                                                                                                                                                                                                                                                                                                                                                                             Gerritsen, Mary E
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Pred. No.
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Pred. No. 4.
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Query Match
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            RESULT 5
US-10-131-819A-392
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                                                                                                                                                                                                                                                                                          Remaining Prior Application
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 392
                                                                                                                                                                                                                                                                               ENGTH: 756
                                                                                     465 EAEDRQN 471
                                                                                                                                                                                                                                                                                                                                                                              OR APPLICATION NUMBER: 60/059184
OR FILING DATE: 1997-09-17
OR APPLICATION NUMBER: 60/059263
OR FILING DATE: 1997-09-18
OR APPLICATION NUMBER: 60/059352
OR FILING DATE: 1997-09-19
                                                                                                                        1 ELEDKQN 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/059115
FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059117
FILING DATE: 1997-09-17
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Application US/10131819A
                                                                                                                                                       Conservative
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9-17
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Pred. No.
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PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR PELICATION NUMBER: 60/056974
PRIOR FILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059115
PRIOR APPLICATION NUMBER: 60/059117
PRIOR PILING DATE: 1997-09-17
PRIOR PILING DATE: 1997-09-17
PRIOR PILING DATE: 1997-09-17 TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3390R1C134
CURRENT APPLICATION NUMBER: US/10/131,819A
CURRENT FILING DATE: 2003-04-24 APPLICANT: APPLICANT APPLICANT: APPLICANT: APPLICANT APPLICANT APPLICANT APPLICANT: APPLICANT APPLICANT: Tumas, Daniel Watanabe, Colin K Wood, William Stewart, Timothy A Zhang, Zemin Goddard, Audrey Godowski, Paul J. Smith, Victoria Sherwood, Steven Gurney, Austin L Gerritsen, Mary E Filvaroff, Ellen DeForge, Laura Beresini,Maureen 1997-09-17 60/059122 60/059184

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PRIOR APPLICATION NUMBER: 60/059588

PRIOR FILING DATE: 1997-09-19

Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 550

SEQ ID NO 392

LENGTH: 756

TYPE: PRT

ORGANISM: Homo Sapien

US-10-131-819A-392
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PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR FILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
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                                                                         PRIOR APPLICATION NUMBER: 60/059352
PRIOR TILING DATE: 1997-09-19
PRIOR APPLICATION NUMBER: 60/059588
PRIOR FILING DATE: 1997-09-19
                                    Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 550
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CURRENT FILING DATE: 2002-04-24
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) ID NO 392
ENGTH: 756
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FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059263
FILING DATE: 1997-09-18
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FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/059117 FILING DATE: 1997-09-17
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FILING DATE: 1997-09-17
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FILING DATE: 1997-09-18
APPLICATION NUMBER: 60/059352
FILING DATE: 1997-09-19
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INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Watanabe, Colin K
Wood, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Stewart, Timothy A. Tumas, Daniel
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Godowski, Paul J.
Gurney, Austin L.
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Filvaroff, Ellen
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71.4%;
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Pred. No. 1.4e+02;
1; Mismatches 1
                                                See File Wrapper or PALM.
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; SEQ ID NO 392
; LENGTH: 756
; TYPE: PRT
; ORGANISM: Homo S
US-10-131-824A-392
Query Match
Best Local Similarity
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; ORGANISM: Homo Sapien
US-10-131-823A-392
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Best Local Similarity 71.4
Matches 5; Conservative
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                                                                                                                                                             Remaining Prior A
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PRIOR EILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60,059113
PRIOR FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/049911 PRIOR FILING DATE: 1997-06-18
                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/059184
PRIOR FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/10/131,824A
CURRENT FILING DATE: 2002-04-24
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                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/0
FILING DATE: 1997-09-18
                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/059117
FILING DATE: 1997-09-17
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FILING DATE: 1997-09-17
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FILING DATE: 1997-09-19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wood, William
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Watanabe, Colin K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Stewart, Timothy A
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                Conservative
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                                                                                                                                                             Application NOS: 550
                                                                                              Sapien
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                              77.8%;
71.4%;
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71.4%;
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                              Score 28; D
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Pred. No. 1.4e+02;
1; Mismatches 1;
               Mismatches
                              4e+02
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US-10-131-829A-392

Sequence 392, Application US/10131829A

GENERAL INFORMATION:
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US-10-131-826A-392
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Best Local S
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NUMBER OF SEQ ID NOS: 550
SEQ ID NO 392
LENGTH: 756
                   APPLICANT:
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   PPLICANT:
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URRENT FILING DATE: 2002-04-24
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RIOR FILING DATE: 1997-06-18
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IOR FILING DATE: 1997-08-26
IOR APPLICATION UNMBER: 60/059113
IOR FILING DATE: 1997-09-17
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FILING DATE: 1997-09-17
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LING DATE: 1997-09-19
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5; Conserv
                                 Baker, Kevin P.
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Beresini, Maureen
DeForge, Laura
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Godowski, Paul J.
Gurney, Austin L.
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                                                                                                                                                                                                                       Conservative
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Pred. No.
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1.4e+02;
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RESULT 10
US-10-125-926A-392
US-10-125-926A-392, App
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Best Local Similarity
Tatches 5; Conserve
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US-10-131-829A-392
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GENERAL INFORMATION:
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LENGTH: 756
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FILING DATE: 1997-09-19
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FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059115
FILING DATE: 1997-09-17
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FILING DATE: 1997-09-17
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FILING DATE: 1997-09-18
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LING DATE: 1997-09-
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                                                           Gao, Wei-Qiang
Gerritsen, Mary E.
                                                                                           Desnoyers, Luc
Filvaroff, Ellen
                Gurney, Austin L.
                             Godowski, Paul J
                                              Goddard, Audrey
Sherwood, Steven
                                                                                                                       DeForge,Laura
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Wood, William
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Filvaroff, Ellen
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Godowski, Paul J.
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9-17:
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Pred. No.
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1997-06-18

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RESULT 11
US-10-127-829A-392
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; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-125-928A-392
                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 392,
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Best Local
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NUMBER OF SEQ ID
SEQ ID NO 392
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APPLICANT:
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APPLICANT:
NPPLICANT: Zhang, Zemin TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE PITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: 9330RIC85
SURRENT APPLICATION NUMBER: US/10/127,829A
SURRENT FILING DATE: 2002-10-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/125,926A
CURRENT FILING DATE: 2002-10-15
PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR FILING DATE: 1997-08-26
PRIOR FILING DATE: 1997-09-17
PRIOR FILING DATE: 1997-09-17
PRIOR FILING DATE: 1997-09-17
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PRIOR FILING DATE: 1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC ITLE OF INVENTION: ACIDS ENCODING THE SAME THE REFERENCE: P3330R1C80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     465 EAEDRON 471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
nes 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 ELEDKON 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1997-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/059117
FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059122
FILING DATE: 1997-09-17
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FILING DATE: 1997-09-17
                                                                                                                                                                                                           Goddard, Audrey
Godowski, Paul J.
Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                             Baker, Kevin P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATION NUMBER:
                                                                                                         Tumas, Daniel
Watanabe, Colin K
Wood, William
                                                                                                                                                         Stewart, Timothy A.
                                                                                                                                                                           Sherwood, Steven Smith, Victoria
                                                                                                                                                                                                                                                                                                                                          DeForge, Laura
                                                                                                                                                                                                                                                                  Gerritsen, Mary E.
                                                                                                                                                                                                                                                                                   Gao, Wei-Qiang
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Filvaroff, Ellen
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Watanabe, Colin K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application data removed - See File Wrapper or NOS: 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1997-09-
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71.4%;
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
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                                                                    POLYPEPTIDES AND NUCLEIC
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Query Match
Best Local Similarity
""" on Serve
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US-10-127-831A-392
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NUMBER OF SEQ ID NOS: 550

SEQ ID NO 392

LENGTH: 756

TYPE: PRT
ORGANIAM: Homo Sapien
US-10-127-829A-392
                                                            TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C107
CURRENT FPLICATION NUMBER: US/10/127,831A
CURRENT FILING DATE: 2002-10-15
PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR FILING DATE: 1997-08-26
PRIOR FILING DATE: 1997-08-26
PRIOR FILING DATE: 1997-08-27
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PRIOR FILING DATE: 1997-09-18
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PRIOR FILING DATE: 1997-09-17
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.465 EAEDRON 471
APPLICATION NUMBER: 60/059115
FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059117
FILING DATE: 1997-09-17
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FILING DATE: 1997-09-19
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FILING DATE: 1997-09-17
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APPLICATION NUMBER: 60/059117
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FILING DATE: 1997-08-26
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Wood, William
                                                                                                                                                                                                                                                                                                                                                                                    Stewart, Timothy A.
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                                                                                                                                                                                                                                                                                                                                                                   Tumas,Daniel
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gerritsen, Mary E.
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Filvaroff, Ellen
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Pred. No.
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Query Match
Best Local Similarity 71.
                                                                                                            PRIOR APPLICATION NUMBER: 60/049911
PRIOR PILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR PRILING DATE: 1997-08-26
PRIOR ETLING DATE: 1997-09-17
PRIOR FILING DATE: 1997-09-17
PRIOR PILING DATE: 1997-09-17
PRIOR PILING DATE: 1997-09-17
PRIOR FILING DATE: 1997-09-17
PRIOR PILING DATE: 1997-09-17
PRIOR FILING DATE: 1997-09-17
PRIOR PILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059122
PRIOR APPLICATION NUMBER: 60/059184
PRIOR APPLICATION NUMBER: 60/059184
PRIOR APPLICATION NUMBER: 60/059263
PRIOR PILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059263
PRIOR PILING DATE: 1997-09-18
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US-10-127-831A-392
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3330R1C102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/127, 835A
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                                                                               APPLICATION NUMBER: 60/059352
FILING DATE: 1997-09-19
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OR APPLICATION NUMBER: 60/059184
OR FILING DATE: 1997-09-17
OR APPLICATION NUMBER: 60/059263
OR FILING DATE: 1997-09-18
OR APPLICATION NUMBER: 60/059352
OR FILING DATE: 1997-09-19
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Wood, William
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Gurney, Austin L.
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Application data removed - See File Wrapper or PALM
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                                                                             1997-09-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Timothy A.
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71.4%;
                                                        60/059588
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Pred. No.
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; TYPE: PRT
; ORGANISM: Homo
US-10-127-837A-392
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PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR FILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059115
PRIOR APPLICATION NUMBER: 60/059115
PRIOR APPLICATION NUMBER: 60/059115
PRIOR FILING DATE: 1997-09-17
   Query Match
Best Local Similarity
Matches 5; Conserv
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US-10-127-837A-392
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NUMBER OF SEQ II
SEQ ID NO 392
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US-10-127-835A-392
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LENGTH: 756
                                                                                                                                                                                    PRIOR FILING DATE: 1997-09-1
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                                                                                                         LENGTH: 756
TYPE: PRT
                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/059263
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CURRENT FILING DATE: 2002-10-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Lhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3330R1C96
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nes 5; Conserv
                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/
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FILING DATE: 1997-09-17
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                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                  FILING DATE: 1997-09-
                                                                                                                                                    SEQ ID
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Watanabe, Colin K
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71.4%;
                  77.88;
71.48;
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                                                                                                                                                         data removed - See File Wrapper or PALM.
Score 28; DB 6;
Pred. No. 1.4e+02;
1; Mismatches 1
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Conservative

Indels

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APPLICANT: CLUBALLY A.

APPLICANT: Wood, William

APPLICANT: Wood, William

APPLICANT: Lang, Zemin

APPLICANT: Zhang, Zemin

ITITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

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TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

TITLE OF INVENTION NUMBER: G0/010/11 PRIOR FILING DATE: 1997-06-18

PRIOR APPLICATION NUMBER: G0/05911

PRIOR APPLICATION NUMBER: G0/05911

PRIOR APPLICATION NUMBER: G0/05912

PRIOR APPLICATION NUMBER: G0/05912

PRIOR APPLICATION NUMBER: G0/05912

PRIOR APPLICATION NUMBER: G0/05916

PRIOR PILING DATE: 1997-09-19

PRIOR APPLICATION NUMBER: G0/05916

PRIOR PILING DATE: 1997-09-19

PRIOR APPLICATION NUMBER: G0/059352

PRIOR FILING DATE: 1997-09-19
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                                                                                                                                                                                                                                                                                           Remaining Prior Application data removed - See File Wrapper or PALM, NUMBER OF SEQ ID NOS: 550; SEQ ID NO 392; LENGTH: 756; TYPE: PRT ORGANISM: Homo Sapien
US-10-127-842A-392
Search completed: November 13, 2002, 13:39:39 Job time: 3.82979 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 15
US-10-127-842A-392
Sequence 392, Application US/10127842A
GENERAL INFORMATION:
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Best Local Similarity 71.4
Matches 5; Conservative
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Smith, Victoria
Stewart, Timothy A.
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Godowski, Paul J.
Gurney, Austin L.
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Gerritsen, Mary E.
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Filvaroff, Ellen
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Pred. No. 1.4e+02;
1; Mismatches 1
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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             Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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Gapop 10.0 , Gapext 0.5
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36
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pir2: *
pir3: *
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A;Title: Genetics, evolution, and expression of A;Reference number: A26562; MUID:85131334; PMID: A;Accession: A26562 A;Molecule type: mRNA A;Residues: 242-543 <LE2> A;Cross-references: GB:X02165
                                                                                           A;Cross-references: GB:M13016; A;Note: the authors translated 1 as Glu
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QFMSL
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A; Residues: 1-543 <LEW>
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C; Keywords:
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A21762
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c;Speckes: Rattus norvegicus (Norway rat)
C;Date: 27-Jul-1990 #sequence_revision 27-Jul-1990
C;Accession: A21/62
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Matches
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80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6
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T05180	F71921	н87906	A97234	S37744	S22195	T21355	H82244	T19684	C81332	T25010	T37514	F83923	E70215	F89804	S52934
inase	hypothetical prote	protein F25H2.6 [1	ABC-type transport	D C		tica	n. 1	_ '			hypothetical prote		5	alkyl hydroperoxid	alkyl hydroperoxid

ALIGNMENTS

#text_change 13-Aug-1999

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neurofilament triplet L protein - mouse
N;Alternate names: 68K neurofilament protein; NF-L(low) protein; type IV IF protein
C;Species: Mus musculus (house mouse)
C;Date: 31-Mar-1988 #sequence_revision 30-Sep-1993 #text_change 22-Jun-1999
C;Accession: A25227; A26562; A43772; A41012; I55316
R;Lewis, S.A.; Cowan, N.J.
Mol. Cell. Biol. 6, 1529-1534, 1986
A;Title: Anomalous placement of introns in a member of the intermediate filament mul
A;Reference number: A25227; MUID:87064433; PMID:3785173
A;Accession: A25227; MUID:87064433; PMID:3785173
                      R; Lewis, S.A.; Cowan, N.J.
J. Cell Biol. 100, 843-850, 1985
J.Title: Genetics, evolution, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R;Jullen, J.P.; Ramachandran, K.; Grosveld, F. Blochim. Blophys. Acta 825, 398-404, 1985
A;Title: Cloning of a cDNA encoding the smallest neurofilament protein from the A;Reference number: A21762; MUID:85252830; PMID:3925999
A;Accession: A21762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Molecule type: mRNA
A;Residues: 1-287 <JUL>
A;Cross references: GB:M25638; NID:g205683; PIDN:AAA41694.1; PID:g205684
C;Superfamily: cytoskeletal keratin
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                                                                                                                           NID:g200023; PIDN:AAAA39810.1; PID:g387492 the codon GGC for residue 5 as Ala, ACA f
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on of the 68,000-mol-wt neurofilament PMID:3919033
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C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Date: 29-Jan-1993 #sequence_revision 29-Jan-1993 #text_change 21-Jul-2000
C;Accession: S07144; I52832; A60703
R;Julien, J.P.; Grosveld, F.; Yazdanbaksh, K.; Flavell, D.; Meijer, D.; Mushynski, Blochim. Biophys. Acta 909, 10-20, 1987
A;Title: The structure of a human neurofilament gene (NF-L): a unique exon-intron ca;Accession: S07144; MUID:87214213; PMID:3034332
A;Accession: S07144; MUID:87214213; PMID:3034332
A;Cross references: EMBL:XO5608; NID:g1495072; PIDN:CAA29097 A;Note: the authors translated the codon ATG for residue 366 R;Pospelov, V.A.; Pospelova, T.V.; Jullen, J.P. Cell Growth Differ: 5, 187-196, 1994 A;Title: AP-1 and Krox-24 transcription factors activate the A;Reference number: I52832; MUID:94235564; PMID:8180132
                                                                                                                                                                                                                                                                                                                                                                                                         neurofilament triplet L protein - human N;Alternate names: neurofilament light polypeptide (68K) N;Contains: Glu-50 brain peptide
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A; Residues: 1-544 <JUL>
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A;Residues: 52-57 <SIRA,
R;Residues: 52-57 <SIRA,
R;Nakahlira, K.; Ikenaka, K.; Wada, K.; Tamura, T.
J. Biol. Chem. 265, 19786-19791, 1990
A;TItle: Structure of the 68 kDa neurofilament gene and regulation of its expression.
A;Reference number: I55316; MUID:91060592; PMID:2246261
A;Accession: I55316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Molecule type: DNA
A;Residues: 1-5,'Y',7-8,'Y',10-28 <RES>
A;Cross-references: GB:M55423; NID:g200027; PIDN:AAA39812.1; PID:g554245
C;Comment: This is the most abundant of the three neurofilament proteins
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A;Title: Cloning and developmental expression of the murine neurofilament gene family. A;Reference number: A43772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Molecule type: mRNA
A;Residues: 1-5'Y',7-8'Y',10-64'M',66-72'L',74-98','D',100-194','R',196-202,204-239',
A;Cross-references: GB:M20480; NID:9200037; PIDN:AAA39814.1; PID:9200038
A;Nnte: the authors translated the codon CGC for residue 195 as Ala
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sihag, R.K.; Nixon, R.A.
Biol. Chem. 266, 18861-18867, 1991
Title: Identification of Ser-55 as a major protein kinase A phosphorylation (Reference number: A41012; MUID:92011653; PMID:1717455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
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;257-272/Domain: coil 2a, alpha-helical rod #status predicted <R2A>;273-281/Region: linker 2
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Best Local
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human neurofilament gene (NF-L): a unique exon-intron organ:
MUID:87214213; PMID:3034332
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C;Superfamily: cytoskeletal keratin
C;Keywords: brain; coiled coil; intermediate filamer
F;469-544/Product: Glu-50 peptide #status predicted
                                                                                                                                                                               A;Cross-references: GDB:120227
A;Map position: 8p21-8p21
A;Map position: 349/3; 391/2; 498/1
                                                                                                                                                                                                                                                                                                                                                                         R; Nomata, Y.; Watanabe, T.; W
J. Blochem. 93, 825-831, 1983
A;Title: Highly acidic protei
                                                                                                                                                                                                                                        A; Gene: GDB: NEFL; NFL
                                                                                                                                                                                                                                                                                    A;Molecule type: protein
A;Residues: 469-472,'D',474 <NOM>
A;Experimental source: Glu-50 brain
                                                                                                                                                                                                                                                                                                                                                          A; Title: Highly acidic proteins from human brain: purification A; Reference number: A60703; MUID:83265667; PMID:6135695
                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: GB:S70309; NID:g547176; PIDN:AAD14057.1; R;Nomata, Y.; Watanabe, T.; Wada, H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: DNA
A; Residues: 1-10 < POS>
                                                                                                                                                                                                                                                                           A; Note: this acidic
                                                                                                                                                                                                                                                                                                                                               A; Accession: A60703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Accession: I52832
A; Status: prelimina
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   336
                                                                  Local Similarity
nes 7; Conserv
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ELEDKQN 342
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A;Molecule type: protein
A;Residues: 1-547 <GEL>
R;Geisler, N.; Kaufmann, E.; Fischer, S.; Plessmann, U.; Weber, A;Reference number: A91337; MUID:85154583; PMID:3920075
A;Accession: A91337 neurofilament triplet L protein - pig
N;Alternate names: 68K neurofilament protein
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 15-Nov-1984 #sequence_revision 28-May-1986
C;Accession: A91337; A90973; A34569; A02963 R; Geisler, N.; Plessmann, U.; Weber, K. FEBS Lett. 182, 475-478, 1985 1295-1302, 1983 #text_change 10-Oct-1997 7 prot

A; Reference number: A90973 A; Accession: A90973 A; Title: Neurofilament architecture

combines structural principles

of intermediate

A; Molecule type: protein
A; Molecule type: protein
A; Nesidues: 1-82;278-548 <GE2>
A; Note: residue 322 is either lysine or arginine
R; Gonda, Y; Nishizawa, K.; Ando, S.; Kitamura, S.; Minoura
Biochem. Biophys. Res. Commun. 167, 1316-1325, 1990
A; Title: Involvement of protein kinase C in the regulation
A; Reference number: A34569; MUID:90211318; PMID:2108674
A; Accession: A34569 S.; Minoura, Y.; Nishi,

¥.,

Inagaki,

of assembly-disassembly (

A; Status: preliminary

A; Molecule type: protein A; Residues: 9-14;23-29;30-53 <GON>

C;Comment: Mammalian neurofilaments usually contain three polypeptides, L, M, and H ke all other intermediate filament proteins; a conserved alpha-helical region, whose C;Comment: The amino-terminal headpiece is basic with a high content of hydroxyaming all beta turns; domain b is acidic and rich in glutamic acid and lysine residues. C;Comment: The extra mass and high charge density that distinguish the neurofilament c;Comment: The boundaries of the domains between residues 70-92 and 399-402 are not C;Comment: This protein was isolated from spinal cord. C;Superfamily: cytoskeletal keratin C;Superfamily: cytoskeletal keratin C;Superfamily: head <HED>

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A;Accessav...A;Anolecule type: DNA
A;Residues: 1-357 <QUE>
A;Residues: 1-357 <QUE>
A;Cross-references: EMBL;AL049660; GSPDB:GN00061; ATSP:F15B8.70
A;Cross-rental source: cultivar Columbia; BAC clone F15B8
                   RESULT 7
A72287
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                                                                                                                                                                           C; Superfamily: kinase-related transforming protein; protein kinase homology
                                                                                                                                                                                                                                                                                                                                                    hypothetical protein F15B8.70 - Arabidopsis thaliana C;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 23-Apr.1999 #sequence_revision 23-Apr.1999 #text_change 17-Mar-2000 C;Accession: T06746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Biochem. Biophys. Res. Commun. 245, Goto, H.; Wada, Y.; Sakoda, S.; Kaibuchi, K.; Inagaki, M. A;Title: Domain- and site-specific phosphorylation of bovine NF-L by Rho-associated kins A;Reference number: JW0094; MUID:98238650; PMID:9571164
A;Accession: JW0094
A;Molecule ****-
    hypothetical
                                                                                                                                                                                                                                                                                                                     R; Quetier, F.; Benes, V.; Rechmann, S.; Bor, submitted to the Protein Sequence Database,
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A; Accession: T06746
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Date: 03-Jul-1998 #sequence_revision 10-Jul-1998 #text_change 07-May-1999
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D; M1smatches
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Pred. No.
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atabase, April 1999
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26S proteasome regulatory particle chain RPT5 - yeast (Saccharomyces cerevi. N;Alternate names: protein 03258; protein YOR117w; protein YOR3258w; YTA1 p C;Species: Saccharomyces cerevisiae C;Date: 02-Dec.1994 #sequence_revision 02-Dec.1994 #sext_change 19-Jan-2001 C;Accession: S46605; S60993; S61675; S67002; S63870; S34352 R;Schnall, R.; Mannhaupt, G.; Stucka, R.; Tauer, R.; Ehnle, S.; Schwarzlose
                                                                                                                                                                                                                                   RESULT
S46605
                                                  R;Schnall, R.; Mannhaupt, G.; Stucka, R.; Tauer, R.; Eh
Yeast 10, 1141-1155, 1994
A;Title: Identification of a set of yeast genes coding
A;Reference number: S46605; MUID:95274317; PMID:7754704
                                    A; Reference number: S46605; A; Accession: S46605
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A; Map position: 1
A; Introns: 30/2; 61/
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A; Molecule type; DNA
A; Residues; 1-1418 <SAM>
A; Cross-references: EMBL; AF003145; NID:g2088760; PID:g2088765; PIDN:AAB57718.1; GSPDB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R;Sammons, L.; Wohldmann, P.
submitted to the EMBL Data I.
A;Description: The sequence
A;Reference number: Z18312
A;Accession: T15232
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C; Date:
C; Access
                    A; Status: nucleic acid
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C;Accession: T15232
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type:
A; Residues: 1-117
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Molecule type: DNA
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he EMBL Data Library, May 1997
The sequence of C. elegans co
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 32;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-Sep-1999 #text_change
                                                                                                                                                                                      PPT5 - yeast (Saccharomyces cerevisiae)
YOR117w; protein YOR3258w; YTA1 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cosmid
                                                                                                                                                                                                                                                                                                                                                                                                         DB 2;
2.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          M.L.; Dodson, R., M.S.; Phillips,
                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                            Length 1418;
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                                                                         for a
                                                                                                                                                                                                                                                                                                                                                                                       Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PIDN: AAD36257.1;
                                                                                                           Schwarzlose,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  886/3; 921/3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-Sep-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R.J.; Haft, D.H.; Hi
ps, C.A.; Richardson,
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                                                                       family of putative
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A:Map position: 15R
C;Superfamily: ATP-de
C;Keywords: ATP; nucl
E;195-405/Domain: Fts
F;222-229/Region: nuc
                                          A; Note:
A; Note:
C; Superf
                                                                                                                                   A; Molecule type: mRNA
A; Residues: 1-544 < CHA>
                                                                                                                                                                                                                                                                         R;Charnas, L.R.;
J. Neurosci. 12,
                                                                                                                                                                                                                                                                                                                         low molecular weight neurofilament protein XNF-L - C:Species: Xenopus laevis (African clawed frog) C:Date: 31-Mar-1993 #sequence_revision 18-Noy-1994 C:Accession: B44841
                                                                                                                                                                                A; Status: preliminary
                                                                                                                                                                                                            A; Reference number: A44841; A; Accession: B44841
                                                                                                                                                                                                                                                       A; Title: Identification and
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                                                                                                          A; Experimental source: brain
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A;Residues: 1-434 <VOS>
A;Cross references: EMBL:275025; NID:g1420310; PIDN:CAA99315.1; PID:g1420311; MIPS:YOR11
A;Experimental source: strain S288C
R;Wiemann, S.; Rechmann, S.; Benes, V.; Voss, H.; Schwager, C.; Vicek, C.; Stegemann, J.
Yeast 12, 281-288, 1996
A;Title: Sequencing and analysis of 51 kb on the right arm of chromosome XV from Sacchar A;Reference number: S63860; MUID:97060020; PMID:8904341
A;Accession: S63870
A;Status: nucleic acid sequence not shown; translation not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: EMBL:X90518; NID:91050808; PIDN:CAA62114.1; PID:91050819
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, August 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: DNA
A; Residues: 1-434 <WIW>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 5
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A:Accession: S67002
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A; Residues: 1-434 <BEN>
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A: Accession: S61675
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A; Residues: 1-434 <WIE>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Superfamily: ATP-dependent 26S proteinase; FtsH/SEC18/CDC48-type ATP-binding domain Keywords: ATP; nucleotide binding; P-loop; 195-405/Domain: FtsH/SEC18/CDC48-type ATP-binding domain homology <VATP>;195-405/Domain: nucleotide-binding motif A (P-loop)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gene: SGD:RPT5; YTA1
|Cross-references: SGD:S0005643; MIPS:YOR117w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cross-references: EMBL:X94335; NID:g1262139; PIDN:CAA64037.1; VOSS, H.; Benes, V.; Rechmann, S.; Teodoru, C.; Schwager, C.; ubmitted to the Protein Sequence Database, July 1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            90
                                                  sequence inconsistent with the nucleotide translation sequence extracted from NCBI backbone (NCBIN:110225,
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5; Conserv
                                     cytoskeletal keratin
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                                                                                                                                                                                                                                                                                                     Szaro,
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Pred. No. 1e+02;
2; Mismatches
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                                                     NCBIP:110226)
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Paces, V.; Ansorge,
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Match

86.1%;

Score

31; DB 2;

Length 544

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A; Accum.
A; Status: preiim.
A; Molecule type: DNA
A; Molecule type: DNA
A; Molecule type: GB: 297342;
GB: GB: 297342;
                                                                                                                                                                                                                                                                                   A;Title: Analysis of 1.9 Mb of contiguous sequence from chromosome 4 of Arabidopsis A;Reference number: A71400; MUID:98121113; PMID:9461215 A;Accession: B71438
                                                                                                                                                                                                                                                                                                                                                                                                        avanagh, T.; Hempel, S.; |
Nature 391, 485-488, 1998
                                                                                                                                                              A; Map position:
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                                                                                                                                                                                                                                                                                                                                                                                   A; Authors: Mueller-Auer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R; Bevan, M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C: Species: Arabidopsis thaliana A; Variety: columbia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C;Accession: C71438
R;Bencroft, I.; Bent, E.; Love, K.; Goodman, H.; Dean, C.; Bergkamp, R.; R;Bevan, M.; Bancroft, I.; Hent, E.; Love, K.; Goodman, H.; Dean, C.; Bergkamp, R.; P.; Wedler, H.; Wedler, E.; Wambutt, R.; Weitzenegger, T.; Pohl; T.M.; Terryn, N.; avanagh, T.; Hempel, S.; Kotter, P.; Entian, K.D.; Rieger, M.; Schaeffer, M.; Funk, Nature 391, 485-488, 1998
Nature 391, 485-488, 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hypothetical protein - Arabidopsis thallana
C;Species: Arabidopsis thallana (mouse-ear cress)
A;Variety: columbia
C;Date: 03-Aug-1998 #sequence_revision 03-Aug-1998 #text_change 20-Jun-2000
C;Accession: C71438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hypothetical protein -
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                                                                                                                                                                                                                                                                                                                                                                                                                                               P.; Wedler,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type:
A; Residues: 1-655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Authors: Mueller-Auer, S.; Silvey, M.; James, R.; Montfort, A.; Pons, A.; Puigo erhoft, A.; Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechman,
                                                                                                      Query Match
Best Local
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Best Local
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412 EIEDKEN 418
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                                        1 ELEDKQN 7
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                                                                               Similarity 5; Conserv
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H.; Wedler, E.; Wambutt, R.; Weitzenegger, T.; Pohl, T.M.; Terryn, N.;
Hempel, S.; Kotter, P.; Entian, K.D.; Rieger, M.; Schaeffer, M.; Funk,
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5; Conserv
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thaliana (mouse-ear cress)
                                                                                                                                                                                                                                                                                                                                                     S.; Silvey, M.; James, R.; Montfort,
Jones, J.D.G.; Eneva, T.; Palme, K.; )
                                                                                                86.1%;
71.4%;
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71.48;
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                                                                                                                                                                                              NID:g2245031; PID:g224505;
                                                                                                                                                                                                                                                       acid sequence
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                                                                                                Score 31; DB 2;
Pred. No. 1.6e+0
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Pred. No.
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..6e+02;
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                                                                                                            Length 674;
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Benes, V.;
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hman, S.
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RESULT 15
T34107
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C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 21-Jul-2000
C;Accession: E64431
R;Bult, C.J.; White, O.; Olsen, G.J.; Zhou, L.; Fleischmann, R.D.; Sutton, G.G.; Blake, Reich, C.I.; Overbeek, R.; Kirkness, E.F.; Weinstock, K.G.; Merrick, J.M.; Glodek, A. rson, J.D.; Sadow, P.W.; Hanna, M.C.; Cotton, M.D.; Roberts, K.M.; Hurst, M.A. Science 273, 1058-1073, 1996
Science 273, 1058-1073, 1996
A;Authors: Kaine, B.P.; Borodovsky, M.; Klenk, H.P.; Fraser, C.M.; Smith, H.O.; Woese, A;Itile: Complete genome sequence of the methanogenic archaeon, Methanococcus jannaschi A;Reference number: A64300; MUID:96337999; pMID:8688087
A;Accession: E64431
hypothetical protein C18C4.5 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 29-Oct-1999
C;Accession: T34107
R;Gattung, S.
submitted to the EMBL Data Library, April 1996
A;Description: The sequence of C. elegans cosmid C18C4.
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R;anonymous, The C. elegans Sequencing Consortium.
Science 282, 2012-2018, 1998
A;Title: Genome sequence of the nematode C. elegans: a platform for investigating biolog A;Reference number: A75000; MUID:99069613; PMID:9851916
A;Note: see websites genome wustl.edu/gsc/C_elegans/ and www_sanger.ac.uk/Projects/C_ele A;Note: published errata appeared in Science 283, 35, 1999; Science 283, 2103, 1999; and
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A; Residues: 1-887 <STO>
A; Cross-references: GB:chr_III; PIDN:AAA20610.1; PID:g529217; GSPDB:GN00021; CESP:F23F1
A; Note: exon 5 similar to trichohyalin and tropomyosin
C; Genetics:
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C;Species: Caenorhabditis elegans
C;Date: 10-May-2001 #sequence_revision 10-May-2001 #text_change 10-May-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Status: preliminary; nucleic acid sequence not shown; translation A;Molecule type: DNA A;Residues: 1-895 <BUL>
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A; Gene: F23F12.8
A; Map position: 3
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A;Status: preliminary; translated
A;Molecule type: DNA
A;Residues: 1-1091 <GAT>
Search completed: November 13, 2002, 13:23:28
Job time: 13.0152 secs
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A; Introns: 38/3; 95/3; 179/2; 259/3; 301/3; 419/2; 573/3; 613/1;
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A;Experimental source: strain Bristol N2; clone C18C4
C;Genetics:
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A; Accession: T34107
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-!- MISCELLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER MONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM	J. Biol. Chem. 268:16679-16687(1993). 1. FUNCTION: NEUROPITAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, M, AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER. 1. DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT PROTEINS ARE DUE TO THE TAILFPIECE EXTENSIONS. THIS REGION MAY FORM A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH OTHER NEURONAL COMPONENTS OR IONS. 1. PIM: O-GLYCOSYLATED; CONTAINS THREE N-ACETYLGLUCOSAMINE SIDE CHAINS.	[4] [4] MEDLINE-93346421; PubMed-8344946; MEDLINE-93346421; PubMed-8344946; Dong D.LY., Xu ZS., Chevrier M.R., Cotter R.J., Cleveland D.W., Hart G.W.; "Glycosylation of mammalian neurofilaments. Localization of multiple O-linked N-acetylglucosamine moieties on neurofilament polypeptides L and M.";	FROM N.A. PubMed=77 T., Palgi of the ra n of NGF a 40:177-18	[2] [2] [2] [2] [2] [3] [4] [5] [5] [6] [6] [6] [7] [7] [7] [8] [8] [8] [8] [8] [8] [8] [8] [8] [8	iax_D=10110; REWE FROM N.A. INE=90184052; PubMed=25166 S.S., Liem R.K.H.; ression of rat neurofilame ression on-neuronal cells J. Cell Biol. 50:475-490,	RAT RAT NFL_RAT NFL_RAT STANDARD; PRT; 541 AA. P19527; Q63367; 01-FEB-1991 (Rel. 17, Created) 01-OCT-1996 (Rel. 34, Last sequence update) 16-CCT-2001 (Rel. 40, Last annotation update) Neurofilament triplet L protein (68 kDa neurofilament protein) (Neurofilament light polypeptide) (NF-L) NEFL OR NFL OR NF68. Rattus norvegicus (Rat). Rattus norvegicus (Rat). Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.

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       SEQUENCE FROM N.A.
TISSUE-Brain;
MEDLINE-87064433; PubMed-3785173;
Lewis S.A., Cowan N.J.;
                                                                               Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalla; Eutherla; Rodentla;
NCBI_TaxID=10090;
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01-OCT-1993 (Rel. 27, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Neurofilament triplet L protein (68 kDa neurofilament protein)
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PROSITE; PS00226; IF; 1.
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"Structure of the 68-kDa neurofilament expression.";
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NAKAHITA K., Ikenaka K., W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lewis S.A., Cowan N.J.;
"Genetics, evolution, and expression of the 68,000-mol-wt neurofilament protein: isolation of a cloned cDNA probe.";
J. Cell Biol. 100:843-850(1985).
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Lew1s S.A., Cowan N.J.;
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Julien J.-P. Meyer D., Flavell D., Hu
"Cloning and developmental expression
gene family.";
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TISSUE-Brain;
                                                       BIOL. Chem. 265:19786-19791(1990).

FUNCTION: NEUROFILAMENTS USUALLY CONTAIN THREE IF PROTEINS: L, M AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER.

DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH THE NEUROFILAMENT, PROTEINS FROM ALL OTHER INVERMEDIATE FILAMENT PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FO A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH OTHER NEURONAL COMPONENTS OR IONS.

MISCELLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM PAT NATURE.
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SIMILARITY: BELONGS TO THE INTERMEDIATE FILAMENT FAMILY.
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aka K., Wada K.,
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01-APR-1988 (Rel. 07, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Neurofilament triplet L protein (68 kDa neurofilament protein)
(Neurofilament tight polypeptide) (NF-L).
NEFL OR NFL OR NF68.
HOMO Sapiens (Human).
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MEDLINE-87214213; Pubmed-3034332;
Julien J.-P., Grosveld F., Yazdan
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DISEASE: DEFECTS IN NEFL ARE A CAUSE OF CHARCOT-MARIE-TOOTH DESEASE TYPE 2E (CMT2E).
MISCELLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOBOLYMERIC 10 FILAMENTS: BELONGS TO THE INTERMEDIATE FILAMENTS.
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lov V.A., Pospelova T.V., Julien J.-P.;
and Krox-24 transcription factors activate the neurofilament
gene promoter in P19 embryonal carcinoma cells.";
Growth Differ. 5:187-196(1994).
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MEDLINE-85154583; PubMed-39200...,
Gelsler N., Plessmann U., Weber K.;
"The complete amino acid sequence of
neurofilament protein (NF-L).";
"FBS Lett. 182:475-478(1985).
                                                                                                                                                                                                                                                                                                                                                                                      PIG.
                                                                                                                                                                              Eukaryota;
Mammalia; E
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P02547;
21-JUL-1986
01-OCT-1996
16-OCT-2001
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EMBL; S70309; AAD14057.1;
PIR; S07144; S07144.
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Late filament; Coiled coil; Neurone; Glycoprotein;

Charcot-Marie-Tooth disease.
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(Rel. 40, Last annotation update)
ant triplet I protein (68 kDa neurofilament
nent light polypeptide) (NF-L).
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0-LINKED (GLCNAC) (BY SIMILARITY).
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P0.5248; P7.9127;
21-JUL-1.986 (Rel. 01, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Neurofilament triplet L protein (68 kDa neurofilament protein)
(Neurofilament light polypeptide) (NF-L) (Micro glutamic acid-)
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STRAIN-Holstein; TISSUE-Brain;
Hill W.D., Zhang L., Balin B.J
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Mammalia; Eutheria;
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SEQUENCE OF 468-554
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Pfam; PF00038; filament; 1.
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MISCELLANGUUS: NF-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERNEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-1
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COIL 2A.
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OR K.
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Pred. No.
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PRSA_YEAST
ID PRSA_YEAST
AC 933297;
DT 01-FEB-1994 (
DT 16-OCT-2001 (
DE 26S protease
DE (TBP-1).
GN RPT5 OR YTA1
OS Saccharomyces
OC Eukaryota; Ft
OX NCBI_TaxID-45
                                                                                                                                                                                                                           RESULT
                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches 7
                 Saccharomyces cerevisiae (Baker's yeast).
Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; Saccharomycetaceae; Saccharomyces.
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CONFLICT
SEQUENCE
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DOMAIN
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                                                                                                       6S protease
                                                                                                                                                                                                                                                                            335
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-85154567; PubMed-3884373;
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                                                                                                                                                                                                                                                                                              1 ELEDKQN 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FUNCTION: NEUROFILAMENT, USUALLY CONTAIN THREE IF PROTEINS: L, M, AND H WHICH ARE INVOLVED IN THE MAINTENANCE OF NEURONAL CALIBER.

DOMAIN: THE EXTRA MASS AND HIGH CHARGE DENSITY THAT DISTINGUISH THE NEUROFILAMENT PROTEINS FROM ALL OTHER INTERMEDIATE FILAMENT PROTEINS ARE DUE TO THE TAILPIECE EXTENSIONS. THIS REGION MAY FORM A CHARGED SCAFFOLDING STRUCTURE SUITABLE FOR INTERACTION WITH OTHER NEURONAL COMPONENTS OR IONS.

MISCELLANEOUS: NF-L IS THE MOST ABUNDANT OF THE THREE NEUROFILAMENT PROTEINS AND, AS THE OTHER NONEPITHELIAL INTERMEDIATE FILAMENT PROTEINS, IT CAN FORM HOMOPOLYMERIC 10-NM
                                                                                                                                                                                                                                                                            ELEDKQN
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(Rel.
(Rel.
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                                                                                                     regulatory
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28, Last sequence update)
40, Last annotation update)
latory subunit 6A (TAT-binding
                Saccharomycetaceae;
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396
554
124
127
137
233
252
271
296
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554
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                                                                03258 OR YOR3258W
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COIL 2A.
LINKER 2.
COIL 2B.
COIL 2B.
TAIL, SUBDOMAIN B.
TAIL, SUBDOMAIN B.
MISSING (IN REF. 2).
A -> AEA (IN REF. 2).
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ROD (BY SIMILARITY).
TAIL (BY SIMILARITY).
COIL 1A.
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BY SIMILARITY.
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Pred. No. 4.8;
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                Saccharomyces
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RESULT 7

NEL_XENLA STAN
ID WELLXENLA STAN
AC P35616;
DT 01-UUN-1994 (Rel. 2
DT 01-JUN-1994 (Rel. 2
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Best Local S
Matches 5
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NP_BIND
SEQUENCE 4
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EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SGD; S0005643; RPT5.
InterPro; IPR003593; AAA_ATPase.
InterPro; IPR003959; AAA_ATPase_centr.
InterPro; IPR003960; AAA_sub.
Pfam; PF00004; AAA; 1.
SMART; SM00382; AAA; 1.
TIGRRAMS; TIGR01242; 26Sp45; 1.
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STRAIN-S288c / FY1679;
MEDLINE-97060020; PubMed-8904341;
Wlemann S., Rechmann S., Benes V., Voss H., Schwager C., Vlcek C.
Stegemann J., Zimmermann J., Erfle H., Paces V., Ansorge W.;
"Sequencing and analysis of 51 kb on the right arm of chromosome from Saccharomyces cerevisiae reveals 30 open reading frames.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE-95274317; PubMed-7754704;
Schnall R., Mannhaupt G., Stucka R., Tauer R., Ehnle S.,
Schwarzlose C., Vetter I., Feldmann H.;
"Identification of a set of yeast genes coding for a novel family putative APPases with high similarity to constituents of the 26S protease complex.";
Yeast 10:1141-1155(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. STRAIN-C836; MEDLINE-95274317;
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III; X90518; CAA62114.1; -.

III; X94335; CAA6037.1; -.

III; Z75025; CAA99315.1; -.

II; S46605; S46605.
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5; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                    434
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222 229 ATP (POTENTIAL).
434 AA; 48255 MW; C215422033FCE830 CRC64;
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 Created)
 Last seq.

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71.4%;
sequence
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Pred. No.
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YLX8_CAEEL
ID YLX8_C
AC P46504
DT 01-NOV
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P46504;
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Eukaryota; Metazoa; Chordata; Cranlata; Vertebrata; I
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea;
Xenopodinae; Xenopus.
MCBI_TaxID-8355;
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rPro; IPR001664; IF.
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6; Conser
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PS00226; IF; 1.
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1 104.7
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  1. 32, Created)
1. 32, Last sequence update)
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85.7%;
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COIL 1A.
LINKER 1.
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COIL 2A.
TAIL, SUBDOMAIN A
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Pred. No.
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POLY-GLU.
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                                                                                                                    887
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                        chromosome
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; Pipidae;
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in Xenopus
                      precursor
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RESULT A
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Best Local Similarity 71.4
Matches 5; Conservative
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15-JUL-1998 (
15-JUL-1998 (
16-OCT-2001 (
                                                                                                                                                                                SEQUENCE FROM N.A.

STRAIN-JAL-1 / DSM 2661 / ATCC 43067;

MEDLINE-6337999; PubMed-8688087;

Bult C.J., White O., Olsen G.J., Zhou L., Fleischmann R.D.,

Sutton G.G., Blake J.A., Fitzderald L.M., Clayron R.A., Gocayne J.D.,

Kerlavage A.R., Dougherty B.A., Tomb J.-F., Adams M.D., Reich C.I.,

Overbeek R., Kirkness E.F., Weinstock K.G., Merrick J.M., Glodek A.,

Scott J.L., Geoghagen N.S.M., Weidman J.F., Fuhrmann J.L., Nguyen D.,

Utterback T.R., Kelley J.M., Peterson J.D., Sadow P.W., Hanna M.C.,

Cotton M.D., Roberte K.M., Hurst M.A., Kaine B.P., Borodovsky M.,

Klenk H.-P., Fraser C.M., Smith H.O., Woese C.R., Venter J.C.,

"Complete genome sequence of the methanogenic archaeon, Methanococcus

jannaschii.";
                                     Science 273:1058-1073(1996).

- PTM: THIS PROTEIN UNDERGOES A PROTEIN SELF SPLICING THAT
- POST-TRANSLATIONAL EXCISION OF THE INTERVENING REGION (
FOLLOWED BY PEPTIDE LIGATION (POTENTIAL).
- I- SIMILARITY: BELONGS TO THE UDP-GLUCOSE/GDP-MANNOSE DEHYDI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CARBOHYD
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Methanococcus jannaschii.
Archaea; Euryarchaeota; Methanococci; Methanococcales;
Methanocaldococcaceae; Methanocaldococcus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; U12965; AAA20610.1; -
WORMPep; F23F12.8; CE01255.
InterPro; IPR002557; Chitin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hypothetical protein; SIGNAL 1 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID-2190
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RNBI_TaxID=6239;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. STRAIN-Bristol N2;
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104705 .
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40, Last annotation update)
ein MJ1054 (EC l.l.l.-) [Contains: Mja UDPGD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     36, Created)
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71.48;
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                                                THE UDP-GLUCOSE/GDP-MANNOSE DEHYDROGENASES
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HYPOTHETICAL PROTEIN F23F12.8.

N-LINKED (GLCNAC. . .) (POTENTIAL).

N-LINKED (GLCNAC. . .) (POTENTIAL).

W; 214ACEC6A3CALFA1 CRC64;
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85;
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RESULT 10
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DT 01-JUL
DT 01-JUL
DT 01-JUL
DT 01-JUL
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OS YERSIN
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Best Local :
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ACT_SITE
SEQUENCE
                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.

SPECIES=Y.pest1s; STRAIN=KIM5; PLASMID=pCD1;
MEDLINE=98427122; PubMed=9746557;
Perry R.D., Straley S.C., Fetherston J.D., R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Outer membrane protein yopN (Yop4b)
YOPN OR LCRE OR YPCD1.39C OR Y0042.
Yersinia pseudotuberculosis.
Plasmid pCD1, and Plasmid pIB1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         YOPN_YERPE STANDARD; PRT; 292 AA P16160; 01-APR-1990 (Rel. 14, Created) 01-JUL-1993 (Rel. 26, Last sequence update) 15-JUN-2002 (Rel. 41, Last annotation update) 15-JUN-2002 (Rel. 41, Last annotation update)
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                             SEQUENCE FROM N.A.
SPECIES-Y. pest1s; STRAIN-KIM5; PLASMID-pCD1;
MEDLINE-98422474; PubMed-9748454;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHAIN
                                                                                                                                                                                                                                                             Blattner F.R.;
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                                                                                                                                                                                             "DNA sequencing and analysis 
Yersinia pestis KIM5.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Yersinia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bacteria; Proteobacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PS50818; INTEIN_C_TER; 1.
PROSITE; PS50819; INTEIN_ENDONUCLEASE; 1.
PROSITE; PS50817; INTEIN_N_TER; 1.
Hypothetical protein; Oxidoreductase; NAD;
                                                                                                                                                               Infect.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=632,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam;
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PF03720; UDPG_MGDP_dh_C; 1.
PF03721; UDPG_MGDP_dh_N; 1.
; SM00305; HintC; 1.
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261
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MJA UDP GD INTEIN (POTENTIAL)
HYPOTHETICAL PROTEIN MJ054, 2
(POTENTIAL).
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F511AA68CCA41445
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   Skowronski E.,
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                                                                                                                                                                                                                                                                                J.D., Rose D.J.,
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   Garnes
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                                                                                                                                                                                                                        plasmid pCD1
                                                                                                                                                                                                                                                                                       Gregor
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ROOSSETTE
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Best Local :
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                                                           U1-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Hypothetical protein MPN333 (F10_orf750),
MPN333 OR MP503.
                                                                                                                            YD33_MYCPN
P75445;
01-NOV-1997
                           Mycoplasma pneumoniae. Bacteria; Firmicutes;
                                                                                                                                                                             MYCPN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Parkhill J. Wren B.W. Thomson N.R., Titball R.W., Holden M.T.G., Prentice M.B., Sebaihia M., James K.D., Churcher C., Mungall K.L., Brocks K., Cerdeno-Tarraga A.M., Chillingworth T., Cronin A., Davies R.M., Davis P., Dougan G., Feltwell T., Hamlin N., Holroyd S., Jagels K., Karlyshev A.V., Leather S., Moule S., Oyston P.C.F., Quail M., Rutherford K., Slamonds M., Skelton J., Stevens K., Whitehead S., Barrell B.G.; "Genome sequence of Yersinia pestis, the causative agent of plague."
                                                                                                                                                                                                                                                                                                                                                                                  Outer membrane; Calcium; Plasmid; Virulence; Complete proteome. INIT_MET 0 \ 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     entities requires a license agreement (See http://www.isb-sibor send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Forsberg A., Viltanen A.-M., Skurnik M., Wolf-Watz H.;
"The surface-located YopN protein is involved in calcium signal transduction in Yersinia pseudotuberculosis.";
Mol. Microbiol. 5:977-986(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A., AND SEQUENCE OF 1-8.
SPECIES-Y pseudotuberculosis; STRAIN-YPIII;
MEDLINE-91312137; PubMed-1857212;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SPECIES-Y pestis: STRAIN-CO-92 / MEDLINE-21470413; PubMed-11586360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                       Local Similarity
hes 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kobayashi A., Brubaker R.R., Garcia E., "Structural organization of virulence-associated
                                                                                                                                                                                                                                          95
                                                                                                                                                                                                                                                                       1 ELEDKON 7
                                                                                                                                                                                                                                                                                                                                                                                                                 BL; AF074612; AAC69792.1; -.
BL; AF053946; AAC62565.1; -.
BL; AL117189; CAB54916.1; -.
BL; X51833; CAB36129.1; -.
R; S08669; S08669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FUNCTION: PLAYS A MAJOR ROLE IN REGULATION OF THE LOW-CALCIUM RESPONSE. SEEMS TO SENSE THE CALCIUM CONCENTRATION AND TO TRANSMIT A SIGNAL TO SHUT OFF YOP TRANSCRIPTION WHEN THE CALCIUM CONCENTRATION IS HIGH.

CONCENTRATION IS HIGH.

SUBCELLULAR LOCATION: Outer membrane.

SUBCELLULAR LOCATION: Outer membrane.

SIMILARITY: TO Y.ENTEROCOLITICA YOPN.

SIMILARITY: TO S.TYPHIMURIUM INVE.
                                                                                                                                                                                                                                         III III
ELEQKQN 101
                                                                                                                                                                                                                                                                                                                                                                   292 AA;
                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                          STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                 32538 MW;
                                                                                                                                                                                                                                                                                                                  83.3%;
85.7%;
                           Mollicutes;
                                                                                                                                                                                                                                                                                                    0
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                              873DAA041F70877E CRC64;
                                                                                                                                                                                                                                                                                                  Mismatches
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                         Mycoplasmataceae;
                                                                                                                                                       750
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                                                                                                                                                                                                                                                                                                 1;
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                         Mycoplasma
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               of plague.";
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RESULT 12
Y066_NPVAC
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Best Local S
Matches 5
                                                     This SWISS-PROT entry is copyright. It is produced through a content of the Swiss Institute of Bioinformatics and the EMBL the European Bioinformatics Institute. There are no restrict use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and foentitles requires a license agreement (See http://www.isb-sib.or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                       P11467;
01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
01-NOV-1997 (Rel. 35, Last annotation update)
01-NOV-1997 (Rel. 35, Last annotation update)
Hypothetical 94.0 kDa protein in POL-LEF3 intergenic
Autographa californica nuclear polyhedrosis virus (Ac
                                                                                                                                                                                                                                               SEQUENCE I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hypothetical
TRANSMEM
TRANSMEM
TRANSMEM
TRANSMEM 1
TRANSMEM 1
TRANSMEM 7
SEQUENCE 75
                  Hypothetical
DOMAIN
                                                                                                                                                                              MEDLINE-94303173; PubMed-8030224;
Ayres M.D., Howard S.C., Kuzio J., Lopez-Ferber M., I
"The complete DNA sequence of Autographa californica
polyhedrosis virus ";
Virology 202:586-605(1994).
                                                                                                                                                                                                                                                                                Viruses; dsDNA viruses,
Nucleopolyhedrovirus.
NCBI_TaxID=46015;
                                                                                                                                                                                                                                                                                                                                                                                       Y066_NPVAC
P41467;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the European Bioinformatics Institute. There are no rest
use by non-profit institutions as long as its content
modified and this statement is not removed. Usage by ar
entities requires a license agreement (See http://www.isb
or send an email to license@isb-sib.ch).
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STRAIN-ATCC 29342 / M129;
MEDLINE-97105885; PubMed-8948633;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              565 EIEEKQN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -!- SUBCELLULAR LOCATION: Integral membrane -!- SIMILARITY: TO M.PNEUMONIAE MPN335.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic Acids Res.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Complete sequence analysis of the genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pneumoniae."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Himmelreich R., Hilbert H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 ELEDKON 7
                                                                                                                                                               SIMILARITY: TO CORRESPONDING ORF IN OPMNPV AND LDMNPV.
                                        L22858; AAA66696.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AE000049; AAB96151.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity 5; Conserv
                                                                                                                                                                                                                                                           FROM N.A.
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79
116
143
724
750
                          protein
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53
99
136
163
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85312
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71.4%;
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    WW;
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                POLY-PRO
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POTENTIAL.
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POTENTIAL.
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                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
76A871D2B6633F8A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5CF64FD4EE600E5A CRC64;
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                                                                                                                                                                                                                                                                                                                   (ACMNPV).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           bacterium Mycoplasma
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                                                                                                           restrictions
                                                                                                                                                                                                     nuclear
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                  This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mrna isoforms by ratio polymerase chain reaction.";

J. Biol. Chem. 269:21691-21698(1994).

-I- FUNCTION: RECEPTOR FOR INOSITOL 1,4,5-TRISPHOSPHATE, A SECOND MESSENGER THAT MEDIATES THE RELEASE OF INTRACELLULAR CALCIUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 818-1226 FROM N.A. STRAIN-C3H; TISSUE-Embryo; MEDLINE-94342363; PubMed-8063813;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              De Smedt H., Missiaen L., Parys J.B., Henning R.: Vanilngen S., Gijsens A., Himpens B., Casteels R. "Isoform diversity of the inositol trisphosphate types of mouse origin.";
blochem. J. 322:575-583(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Futatsugi A., Kuwajima G., Mikoshiba K.; "Muscle-specific mRNA isoform encodes a protein composed mainly of N-terminal 175 residues of type 2 Ins(1,4,5)p3 receptor.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Van Den Bosch L., Casteels R.,
"Determination of relative amounts of inositol trisphosphate receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           De Smedt H., Missiaen L., Parys J.B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN=C3H; TISSUE=Embryo; MEDLINE=97218118; PubMed=9065779;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 273-1281 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE-98399819; PubMed-9729462;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 1-272 FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ITPR2 OR ITPR5
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les 5; Conserv
                                                                                                                                                                         DOMAIN: THE RECEPTOR CONTAINS A CALCIUM CHANNEL IN ITS EXTREMITY. ITS LARGE N-TERMINAL CYTOPLASMIC REGION HAS BINDING SITE IN THE N-TERMINUS MODULATIORY SITES IN PORTION IMMEDIATELY UPSTREAM OF THE CHANNEL REGION. PTM: PHOSPHORYLATED ON TYROSINE RESIDUES (BY SIMILARITY; BELONGS TO THE INSP3 RECEPTOR FAMILY.
                                                                                                                                                                                                                                                                                                                                                        SUBUNIT: HOMOTETRAMER (BY SIMILARITY).

SUBCELLULAR LOCATION: Integral membrane protein. Endoplasmic reticulum (By similarity).

ALTERNATIVE PRODUCTS: 2 ISOFORMS; A LONG FORM (SHOWN HERE) AND SHORT FORM/TIPR; ARE PRODUCED BY ALTERNATIVE SPLICING.

TISSUE SPECIFICITY: THE SHORT ISOFORM IS FOUND IN SKELETAL MUSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 ELEDKON 7
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Rodentia;
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71.4%;
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Pred. No. 1.
2; Mismatche
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Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Henning R.H., Sienaert
Casteels R.;
     (See
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1.2e+02;
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  http://www.isb-sib.
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; Murinae; Mus
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Best Local Si
Matches 6;
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SEQUENCE FROM N.A.
STRAIN-ATCC 29342 / M129;
MEDLINE-97105885; PubMed-8948633;
MEDLINE-1-aich R., Hilbert H., Plagens
SEQUENCE FROM N.A.
STRAIN-ATCC 29342 / M129;
MEDLINE-97252497; PubMed-9098066;
Krause D.C., Proft T., Hedreyda C
Herrmann R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MYCPN
                                                                                                                                                                                                                                                                  HMW2 OR MPN310 OR MP526.
Mycoplasma pneumoniae.
Bacteria; Firmicutes; Mo
NCBI_TaxID=2104;
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VARSPLIC
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16-OCT-2001
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                                                                                                                            pneumoniae.
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P75471;
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EMBL; Z71173; CAA94861.1;
EMBL; Z33908; CAA83957.1;
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IPR000493; InsP3_receptor.
IPR000636; M+channel_nlg.
IPR003608; MIR.
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                  Proft T., Hedreyda C.T.,
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85.7%;
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Pred. No. 2e+02;
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N -> NDMGAVI (IN SHORT ISOFORM).

MISSING (IN SHORT ISOFORM).

MI FAE7899B6E9A559B CRC64;
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CYTOPLASMIC
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                  Hilbert H.,
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RESULT 15
IPJS_HUMAN
IDJS_HUMAN
INJS_HUMAN
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Best Local S
Matches 5
                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. (LONG ISOFORM).
MEDLINE-94363219; PubMed-8081734;
Yamamoto-Hino M., Sugiyama T., Hikiti K.
Hasegawa K., Sekine S., Sakurada K., Miy
Hasegawa M., Mikoshiba K.;
"Cloning and characterization of human t
1,4,5-trisphosphate receptors";
Recept. Channels 2:9-22(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IP3S_HUMAN STANDARD,

1P3S_HUMAN STANDARD,

Q14571; 094773;

Q1-571; 09477
SEQUENCE FROM N.A. (SHORT ISOFORM).
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DOMAIN
DOMAIN
SEQUENCE
                                                                                                                                                                                                                                                                                            MEDLINE-98399819; PubMed-9729462;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Transposon mutagenesis reinforces the correlation between Mycoplasma pneumoniae cytoskeletal protein HMW2 and cytadherence.";
J. Bacteriol. 179:2668-2677(1997)
-I- FUNCTION: COMPONENT OF THE CYTOSKELETON-LIKE STRUCTURE WHICH STRAILIZES THE SHAPE OF THE WALL-LESS MYCOPLASMA. THIS CYTOSKELETON-LIKE NETWORK OF ACCESSORY PROTEINS CONTAINING HMW PROTEINS 1 TO 5 ALLOWS THE PROPER ANCHORING OF CYTADHESIN PROTEIN.

IN THE MYCOPLASMAL MEMBRANE AT THE ATTACHMENT ORGANELLE (BY
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5; Conservative
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71.4%;
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K., Miyawaki A., Furuichi T.,
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SMART; SM00472; MIR; 4.
Receptor; Transmembrane; Glycoprotein; Phosphorylation;
Phosphorylation; Cannel; Ion transport; Ca
                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPR000699; Ca-rel_channel.
InterPro; IPR001682; Ca/Na_pore.
InterPro; IPR000493; Insp3_receptor.
'InterPro; IPR000636; M+channel_nlg.
InterPro; IPR003608; MIR.
                                                                                                                                                                                                                                                                                         Endoplasmic splicing.
Alternative splicing.
1 2227
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MIM; 600144; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      use by non-profit institutions as long modified and this statement is not removed. entitles requires a license agreement (See or send an email to license@isb-sib.ch).
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                                                                                                                                                                                             DOMAIN
                                                                                                                                                                                                                                 TRANSMEM
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  97
                                                            Local
                     1 ELEDKON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DOMAIN: THE RECEPTOR CONTAINS A CALCIUM CHANNEL IN ITS C-
EXTREMITY. ITS LARGE N-TERMINAL CYTOPLASMIC REGION HAS THI
BINDING SITE IN THE N-TERMINUS AND MODULATORY SITES IN THE
PORTION IMMEDIATELY UPSTREAM OF THE CHANNEL REGION.
PTM: PHOSPHORYLATED ON TYROSINE RESIDUES (BY SIMILARITY).
MISCELLANEOUS: CALCIUM APPEARS TO INHIBIT LIGAND BINDING RECEPTOR, MOST PROBABLY BY INVERACTING WITH A DISTINCT
CALCIUM-BINDING PROTEIN WHICH THEN INHIBITS THE RECEPTOR.
SIMILARITY: BELONGS TO THE INSPA RECEPTOR FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               reticulum.
ALTERNATIVE PRODUCTS: 2 ISOFORMS; A LONG FORM (SHOWN HERE) AND A SHORT FORM/TIPR; ARE PRODUCED BY ALTERNATIVE SPLICING.
TISSUE SPECIFICITY: THE SHORT ISOFORM IS FOUND IN SKELETAL MUSCLE
ELEQKQN
                                                                                                                                                                                                                                                                                                                                                  PF00520; lon_trans; 1.
PF01365; RYDR_ITPR; 2.
PF02815; MIR; 4.
S; PR00779; INSP3RECEPT
                                              Similarity
6; Conser
                                                                                              2228
2249
2261
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2308
2329
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2373
25416
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2701
                                               Conservative
103
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2260
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M+channel_nlg.
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                                           Score 30; DB
Pred. No. 4.3e
0; Mismatches
                                                                                        PHOSPHORYLATION (POTENTIAL)
IVVGDK -> DASFWI (IN SHORT I
MISSING (IN SHORT ISOFORM)
M; EBSC7DDCDD17F74A CRC64;
                                                                                                                                          CYTOPLASMIC (POTENTIAL)
                                                                                                                                                                                       CYTOPLASMIC (POTENTIAL).
                                                                                                                                                        POTENTIAL
                                                                                                                                                                 EXTRACELLULAR (POTENTIAL).
                                                                                                                                                                               POTENTIAL.
                                                                                                                                                                                                                  EXTRACELLULAR
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                                                                                                                                                                                                                                                                                       CYTOPLASMIC (POTENTIAL).
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                                                                    ₽B
                                                                                                                                                                                                               (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Usage
                                                                 Length 2701;
                                                                                                                                                                                                                                                                                                                Calcium channel;
                                                                                                                ISOFORM).
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S THE LIGAND-
N THE MIDDLE
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